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THE AMERICAN ELEVATOR AND GRAIN TRADE



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VOL. XLI 431 South Dearborn Street, Chicago, Ill., December 15, 1922 NO. 6

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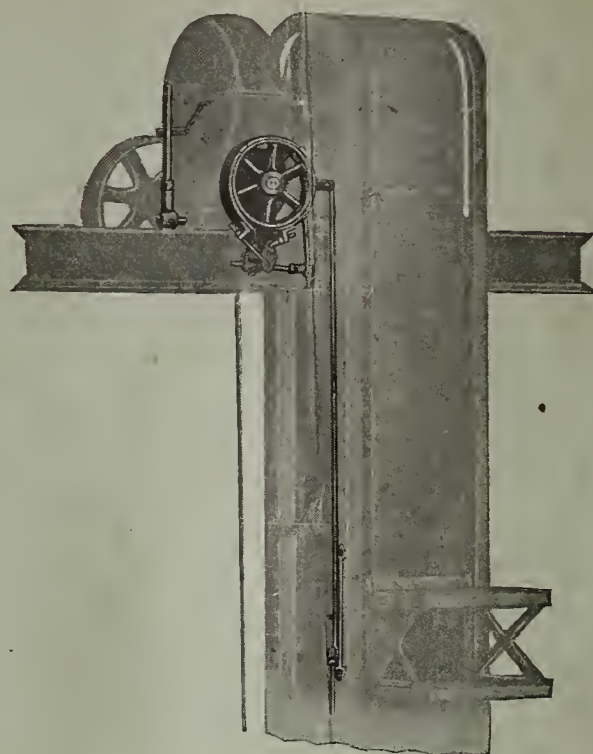
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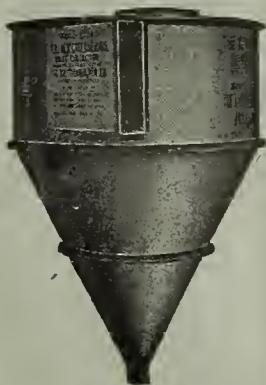
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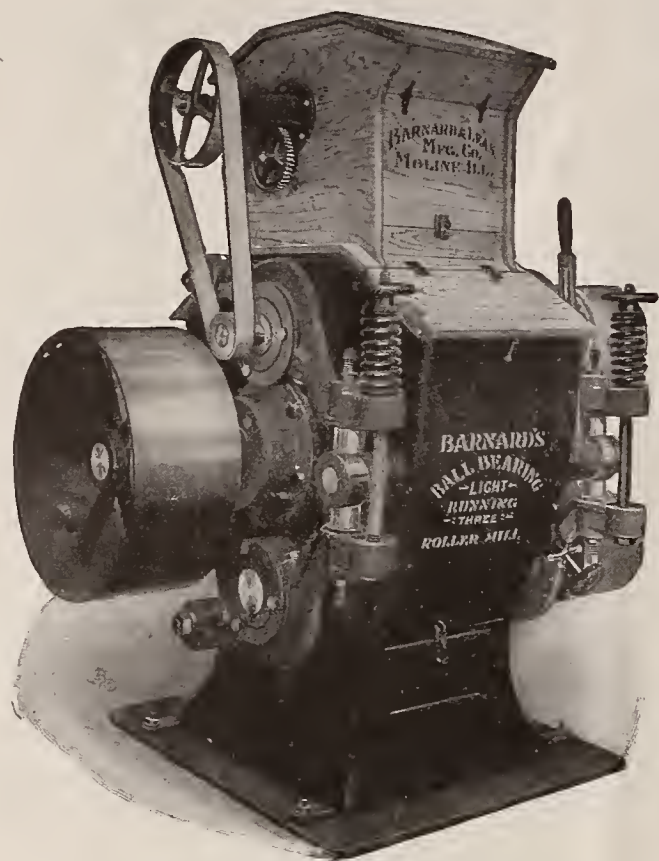
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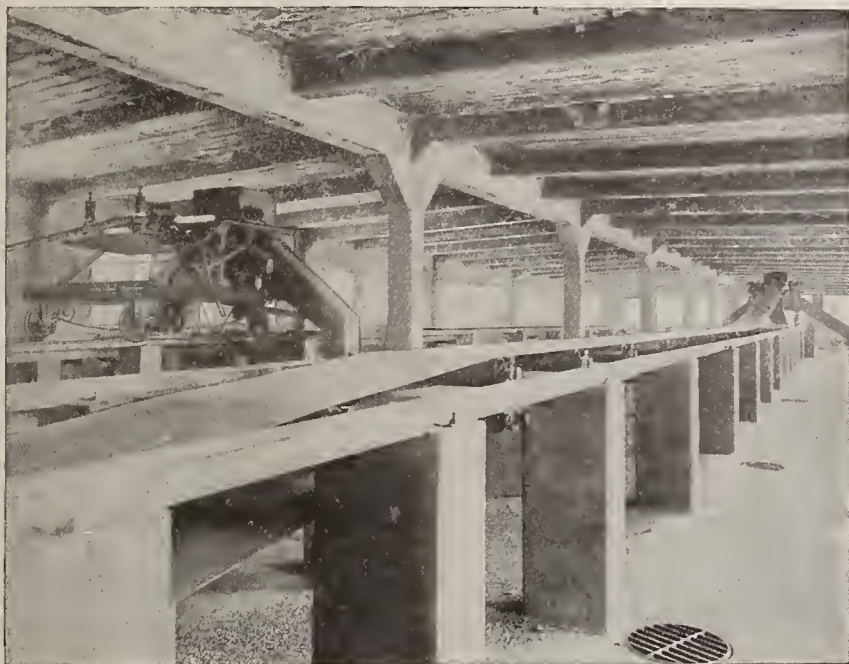
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Indianapolis also takes a natural



The Indianapolis Board of Trade

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Webster Grain Handling Equipment, not only includes marine legs, but a complete line of equipment: Belt Conveyors; Trippers; Elevators; Buckets; Power Transportation Machinery; Loading Hoppers; Power Shovels; Spouting, etc.

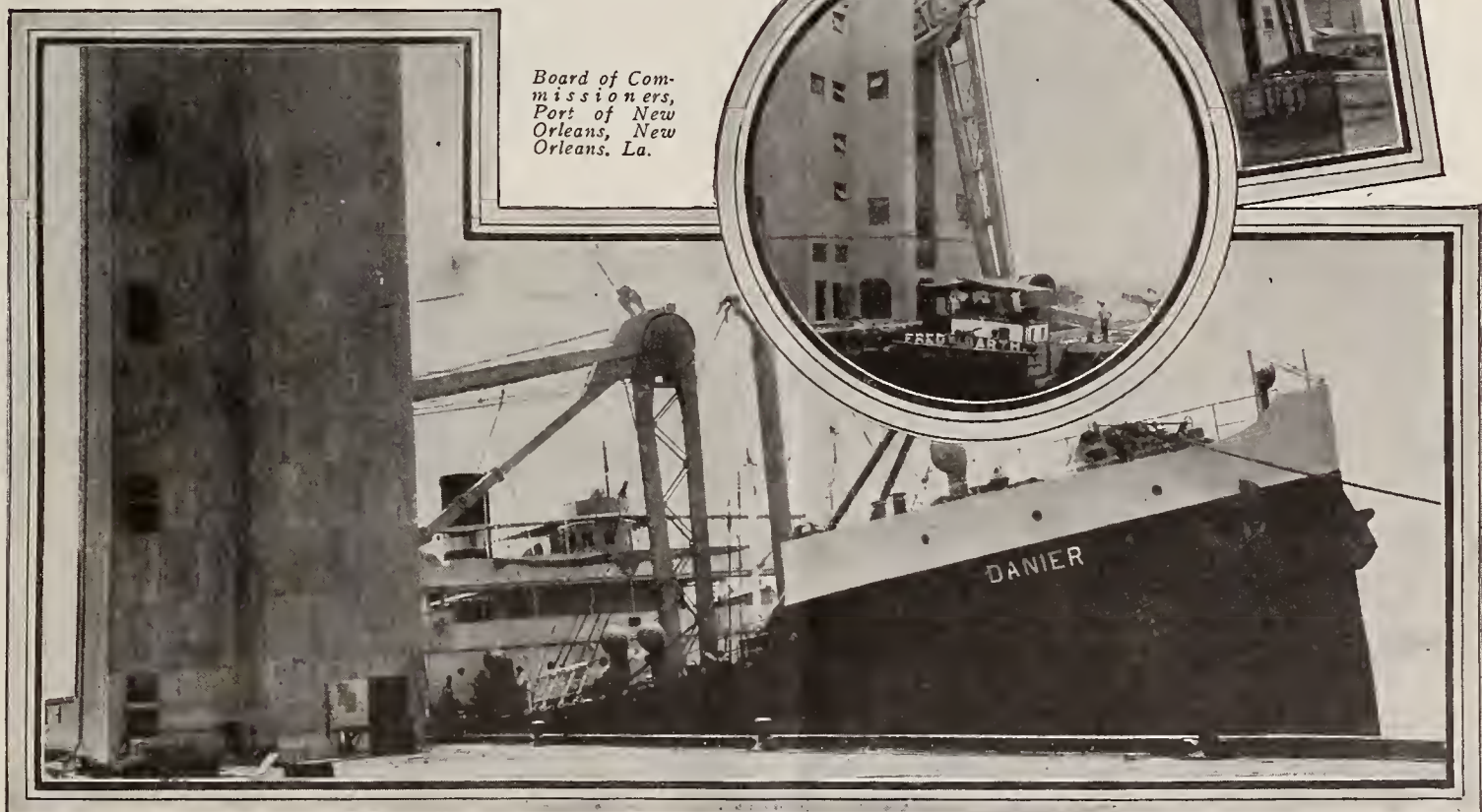
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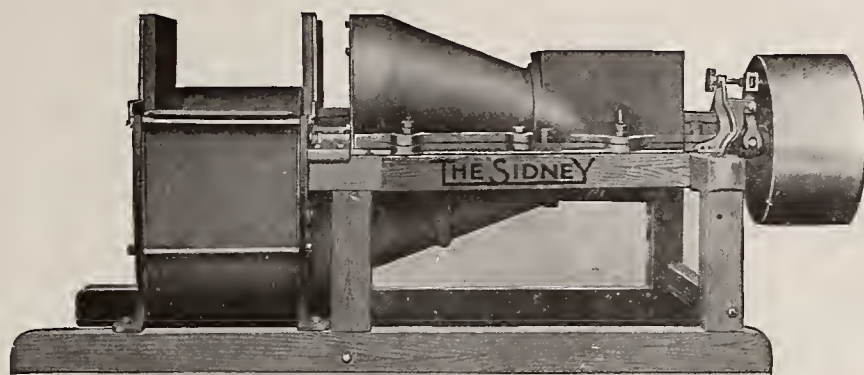
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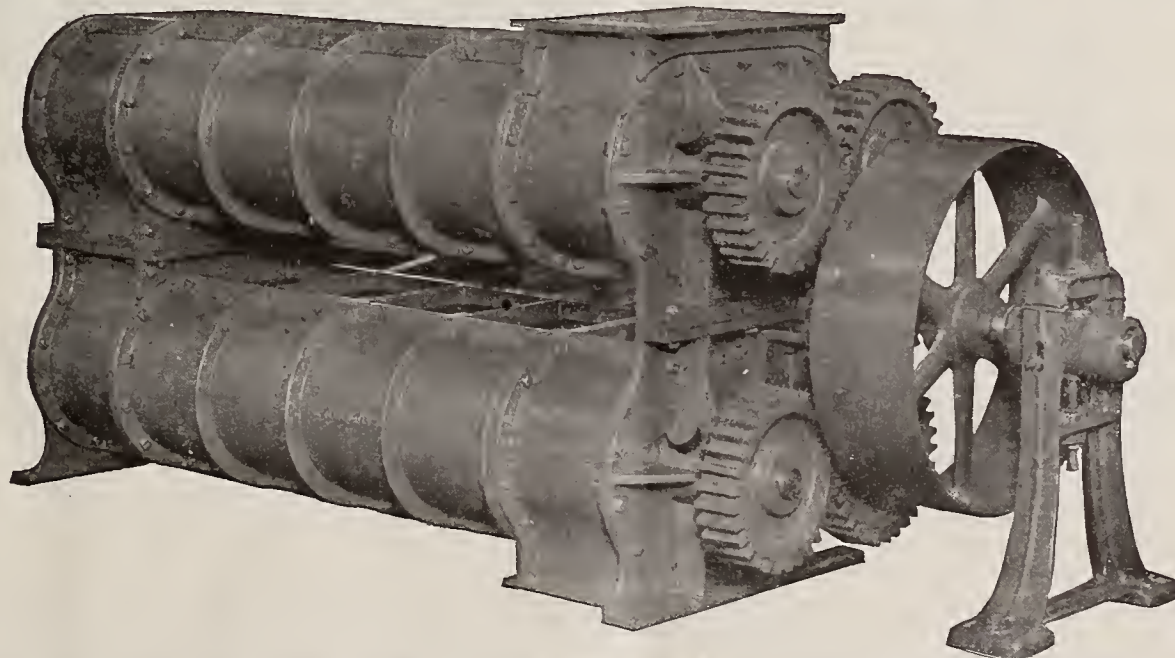
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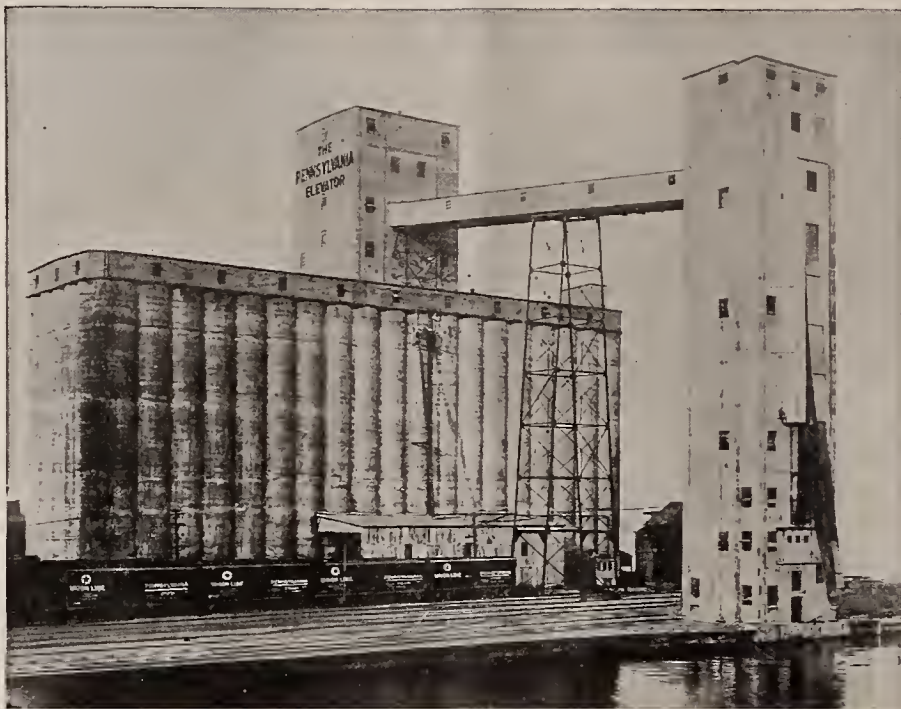
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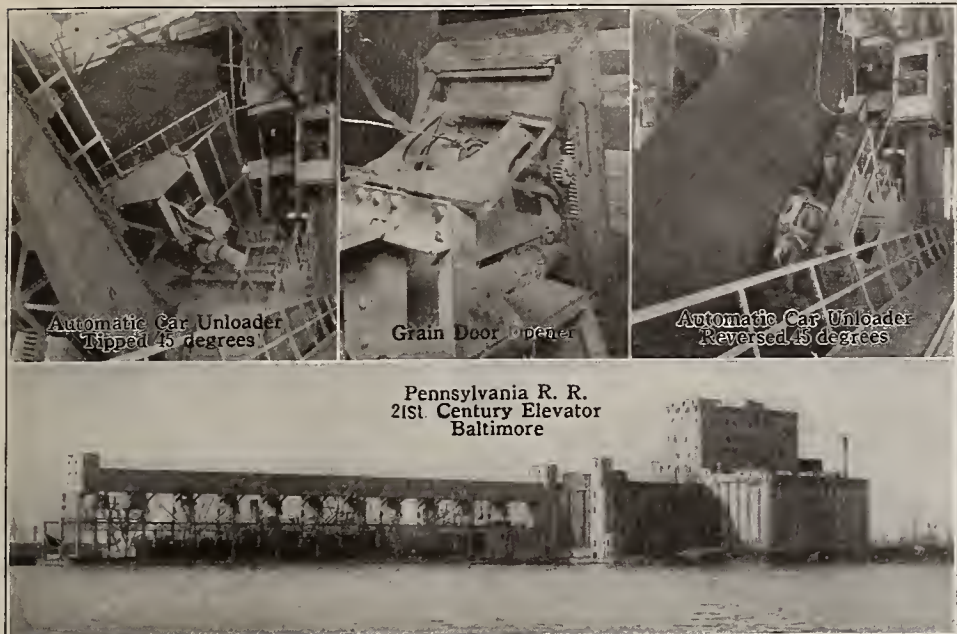
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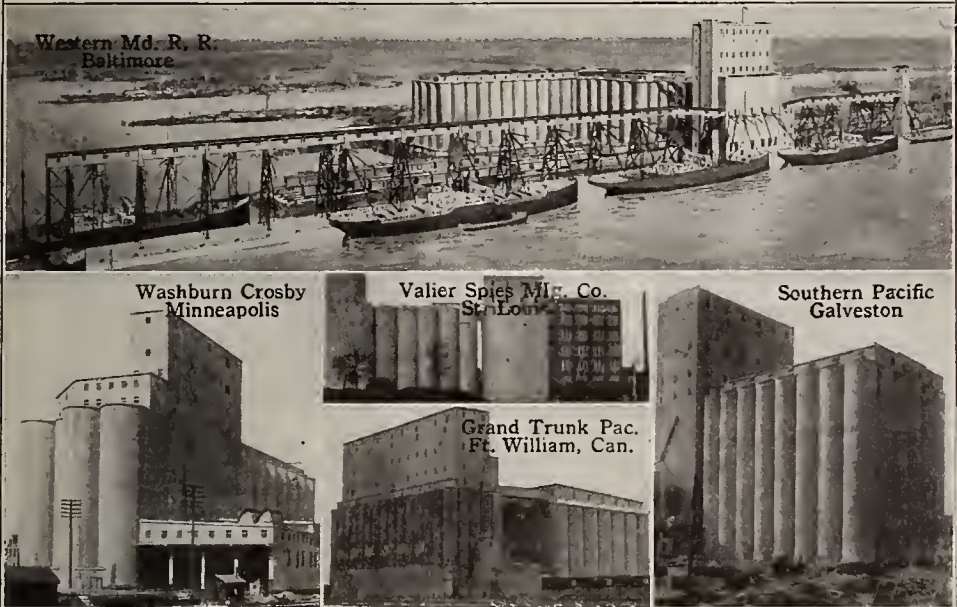
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Completed 1914



Buenos Aires Elevator Co.
Buenos Aires, Argentina
Capacity 750,000 Bushels
Completed 1920



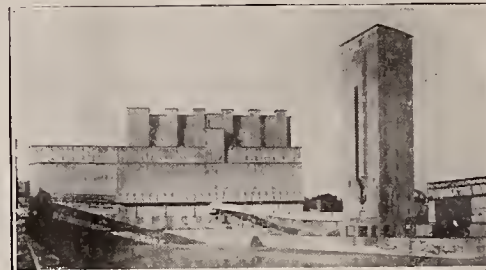
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Harbour Commissioners Elevator No. 2
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Capacity 2,600,000 Bushels
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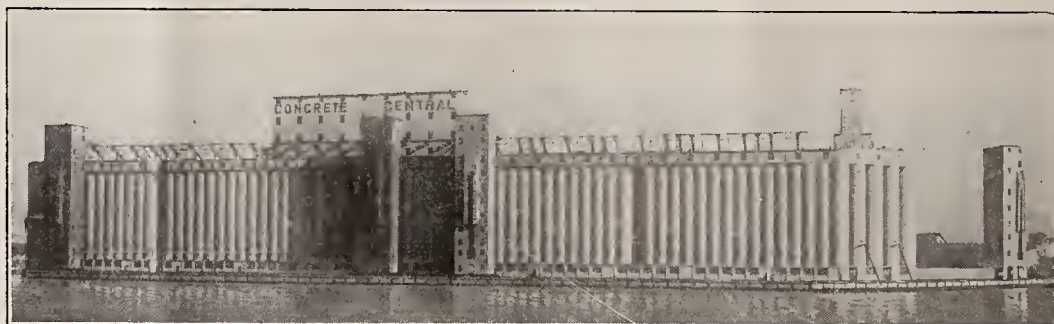
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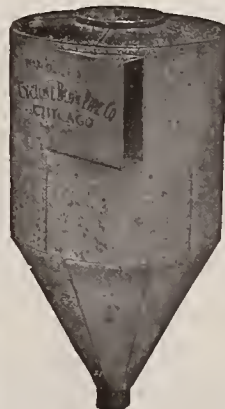
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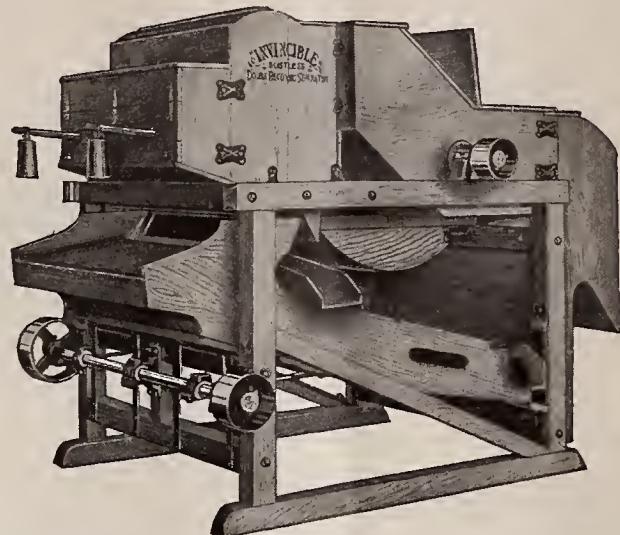
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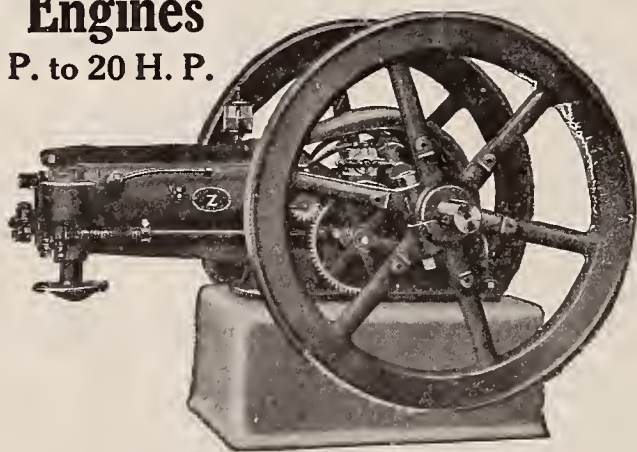
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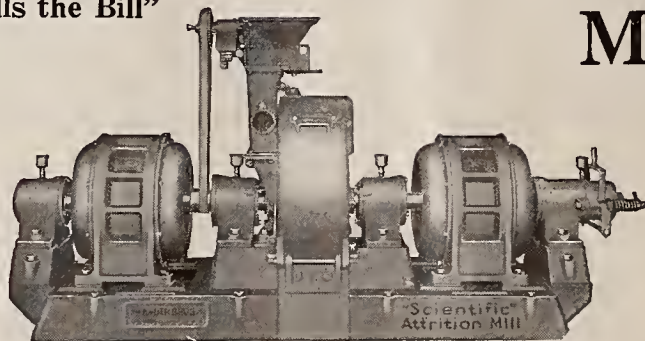
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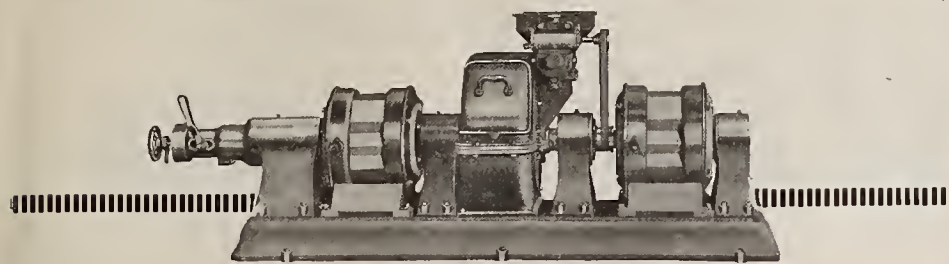
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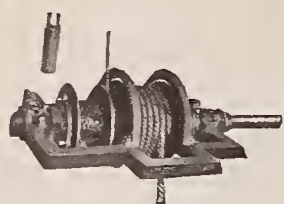
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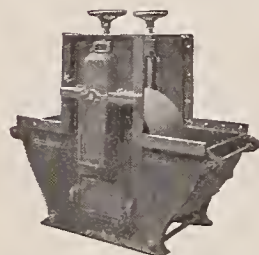
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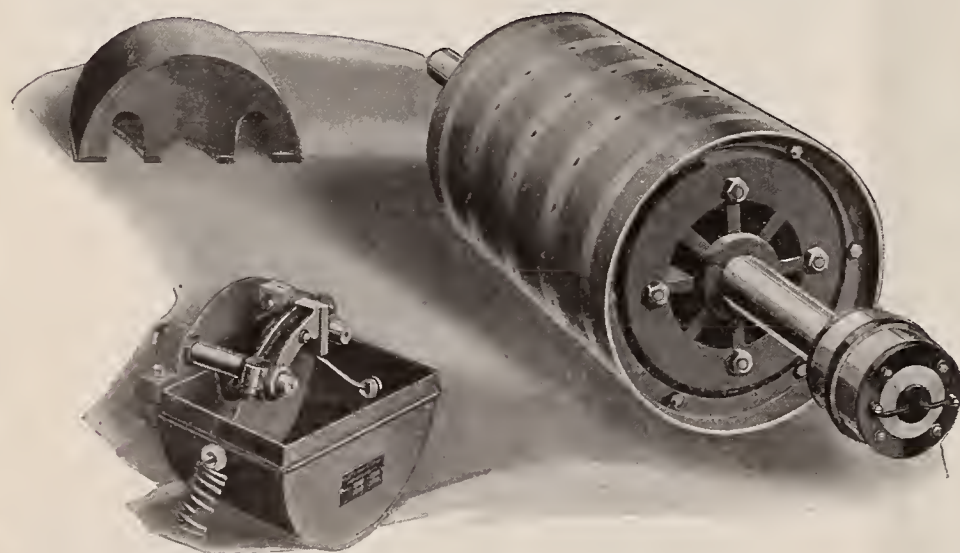
By MILO S. KETCHUM

Design and construction are covered completely in this book of 556 pages. The new second edition brings it up to the minute with fresh data, new cuts, and a modern treatment throughout. Over 150 pages were added to the old edition. The new chapters on "Reinforced Concrete" and "Methods of Construction and Cost of Retaining Walls" are especially valuable. It is the standard work on stresses due to granular materials.

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Morse Chains Speed Export Grain to Sea

New Dellwood Elevator at Buffalo Well Equipped to Handle Canal-Borne Grain with the Greatest Economy and Dispatch So As to Relieve Congestion at the Erie Port

ALL this talk of the St. Lawrence Deep Waterway may bear fruit along about 1930. There may be some anxious enthusiasts in the west who think that all that is necessary is to induce Congress, and then the Canadian Parliament, to adopt a resolution approving the waterway. But after that many engineering problems must be met and solved; and an actual structural job completed that will rival the Panama Canal in size. So when we say "1930" it is more the inspiration of hope than that of sober expectation.

In the meantime there remain the railroads and the New York State Barge Canal. The railroads are a long way from catching up with the increased size and business of the country, since some years before the war when they ceased extending their facilities to any material amount. We are just beginning to realize that we can't regulate earning capacity beyond a certain extent without influencing service. It would take the railroads many years to catch up on their equipment even if the politicians ceased harassing them.

The barge canal in its enlarged state is a comparatively new instrumentality which has great potentialities. Canal operation during the war and after was also hampered by politics so that there was little incentive for private capital to provide vessels on a large scale. The new canal terminal elevator at Gowanus Bay and the experience of the present season will combine to assure an immensely improved service in the future. There will be boats aplenty and at the Buffalo end of the canal the Dellwood Elevator Company has just completed a new 635,000-bushel unit which was designed primarily to transfer grain from cars or steamers into canal boats to be carried to tidewater and then to the hungry people of Europe. The new Dellwood unit, like the elevator on Gowanus Bay, was built by

tef Fegles Construction Company of Minneapolis. In building both houses emphasis was placed upon rapid and dependable handling of grain. And to meet these requirements in both houses, Morse Silent Chain Drives were used as the chief power transmission. They were used because the Fegles company knows that Morse Drives will perform as specified in emergency or in the ordinary day's business. They know that, to keep the golden stream flowing to its destination, power must be delivered with the maximum of precision and efficiency and that the Silent Chain will do that without the waste attending on slip or creep of belts and with all the positiveness but without the noise of gears. They know, too, that, because of its construction the Chain Drive can be used on short centers, with the greatest economy of space, and can handle any horsepower requirement from a fraction of one, to the heaviest elevator load.

In the Dellwood Elevator the two basement and two cupola conveyor belts are each provided with a 30-horsepower drive with speed of 720 to 135 revolutions per minute on 40-inch centers. One short conveyor to transfer grain from the new elevator to Elevator "B" is furnished with a 10-horsepower drive on 36-inch centers; and the drives

for the shovel machines in the marine tower are provided with a 100-horsepower drive, 735 to 181 revolutions per minute, on 58-inch centers. All these drives are covered with metal guards.

In planning for canal service it was necessary that the elevator storage have a considerable number of bins. The ordinary cylindrical tank construction with 10 tanks, has a total of 14 or 15 bins. This was not enough to serve the comparatively small capacity of the canal units and the great number of kinds and grades of grain handled, so a bin arrangement was provided which gave 2 bins and on little more than the ground area required for the usual 14. In addition the work house has 10 bins so that a great number of grain grades can be kept separate and forwarded without confusion.

The new unit occupies a site along the Buffalo River with rail connections with the Buffalo Creek and Pennsylvania Railroads and is in close proximity to such other big terminal elevators as the Concrete-Central, the largest house in Buffalo; the Superior, the Electric, and adjoins the property of the Archer-Daniels Linseed Company. It has been built in front of the so-called "A" and "B" units of the Dellwood Elevator Company and has a dock

located at the proper point for the best operation.

The spouting equipment of the new structure consists of one canal boat spout which extends a total distance of 142 feet and there are two car spouts in the new house. The elevator will be able to spout approximately 40,000 bushels an hour which is twice as fast as it can unload. The conveyor system is so arranged that grain can be unloaded from a lake steamship and spouted direct into cars or canal boats without going into any storage bin in the house. This cannot be done in the old elevator, but by means of belt conveyors grain from the old house can be moved into the new house and spouted into cars or canal boats.

Great interest in the new structure has been taken by the New York State Department of Public Works. The structure will act as the Buffalo grain storage terminal for barge canal lines in the same manner as the new state-owned grain elevator at Gowanus Bay, New York, acts as the receiving end on the Atlantic Seaboard.

But there will be just as much interest shown by grain shippers of the West, for the blockade east of Buffalo this year has meant something like 5 cents a bushel to them in the price of their grain, as Julius H. Barnes recently pointed out.

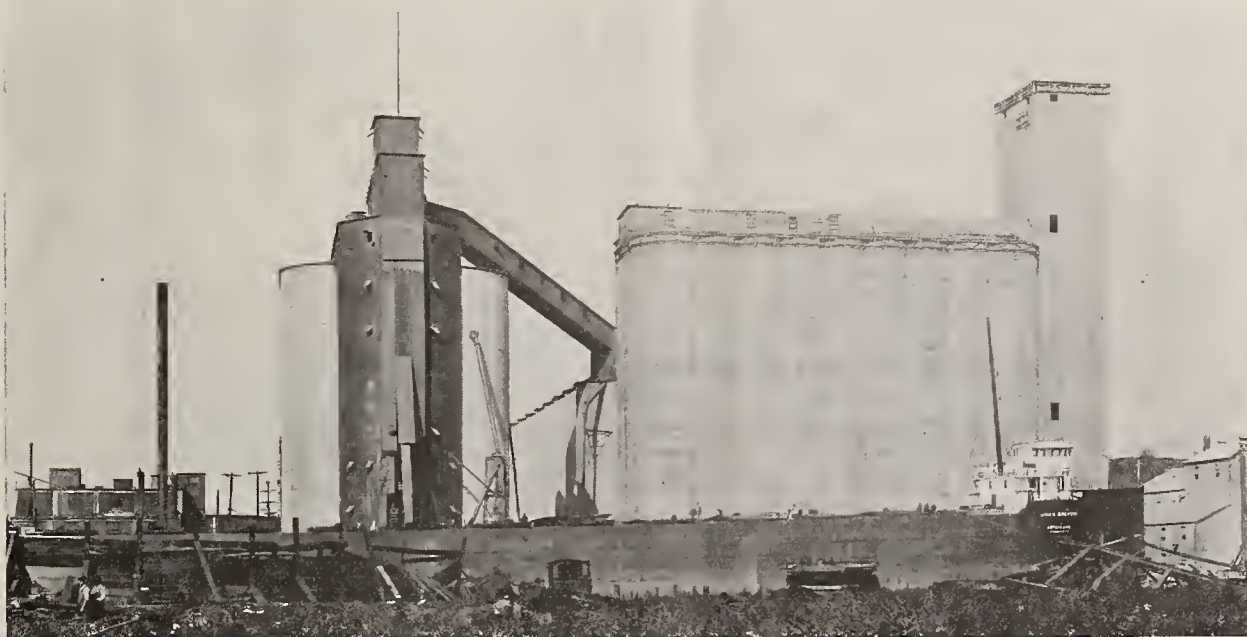
With less canal boats than could be used, as was the case this year, the great advantages inherent in Morse Drives were not so noticeable, for the operation of the plant was, by force of circumstances, of a leisurely and desultory character. But next year there will be a different story.

With barges available in sufficient numbers to keep grain flowing through the house, the value of power transmission which can be depended upon under every operating condition will be apparent. Faulty transmission is not only a source of worry and annoyance to the manage-

ment of an elevator and of added expense in the items of adjustment and repair, but is also a source of material losses due to the inevitable delays which it causes.

A house equipped with Morse Silent Chain Drives is freed from these worries and losses. The construction of the rocker joint and the multiple plates of which the chain is made, reduces to a minimum the strain upon any one point. There is a maximum surface of engagement and the power application is spread evenly over every part of it. A giant of strength has been encompassed in the body of the pigmy, for the space saving characteristic of the drive without sacrifice of power is one of the chief virtues which recommends it to leading engineers in every part of the country. Morse Chains have become an integral part of every modern installation where service, economy and dependability in power transmission are demanded. They meet every requirement of the efficiency engineer and every dream of the operator

who handles them in his day's work. They do more with less than any other power transmission. And the builders and operators of grain elevators are coming to realize that fact, as shown by an ever increasing number of Morse installations.



NEW DELLWOOD ELEVATOR UNIT AT BUFFALO

frontage extending 200 feet along the Buffalo River.

With the completion of the new structure, the Dellwood Elevator Company will have two marine towers on the river side and can load cars on seven tracks at one time. It will also be able, by a direct spouting system, to load grain into canal boats along the river side, the canal boat loading spout being 142 feet long and supported at the canal boat end by a steel tower.

Grain is received from lake steamships at the new house by means of a movable marine tower which can handle grain at the rate of approximately 20,000 bushels an hour. The marine leg is of the Fegles Construction Company's own design. There is no grain cleaning, drying or bleaching equipment in the new unit, although provision has been made for the installation at some later time of grain cleaners.

The elevator is operated and lighted by electricity throughout, furnished from a central station. Eleven electric motors are used to operate, each

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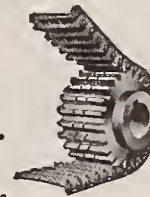
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Established in 1882.



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Established in 1882.

VOL. XLI

CHICAGO, ILLINOIS, DECEMBER 15, 1922

NO. 6

Completing Northern Central Elevator at Baltimore

Final Unit of the Great Pennsylvania Railroad House Brings Capacity Up to 5,000,000 Bushels, Making It One of Our Largest Export Houses

THE finishing touch has been put upon Annex No. 2, the last unit in the 5,000,000-bushel Northern Central Elevator at Canton, Baltimore, Md. The house is owned by the Pennsylvania Railroad and was built by James Stewart & Co., Inc., and both may be justly proud of the house which is one of the largest and finest on the Atlantic Seaboard. The illustration on this page shows Annex No. 2, just completed and Annex No.

inches by 195 feet. The tanks proper are 92 feet 6 inches high. During the erection of this unit all speed records, so far as we can learn, were broken for concrete pouring on a large scale.

On July 20 the forms for the concrete work began to be laid, and on August 4 actual pouring began. When the tanks had risen to a height of 25 feet pouring was stopped for six days to make the fill for the hopper bottoms. The pouring was

has been a large factor in filling up the gap. It was built for speed and many times since it started operating has it had opportunity to prove that the confidence placed in its speed of operation is not misplaced. Some of the factors which make for this rapidity are the four Stewart-Link Belt Car Unloaders which take a car on a platform, clamp it into position, and then tip it at various angles until the grain is run out, the whole process, in-



NEW 1,435,000-BUSHEL ANNEX OF THE NORTHERN CENTRAL ELEVATOR AT BALTIMORE, MD.

1, which was not built until after Annex No. 3 was finished. They were named on the plans according to location and not in their order of construction. Above the storage bins may be seen the top of the workhouse which, at the time it was built, contained many interesting features, some of them making their first appearance before the grain world. We will mention a few of these later, but briefly inasmuch as they were described at length in our issue of July 15, 1920.

The new Annex No. 2 has a capacity of 1,335,000 bushels distributed through 90 cylindrical tanks and 70 interstice bins 125 feet high from mat to cupola and occupying a ground area of 240 feet 6

then resumed and the tanks proper were completed on August 24. This is an average of over 6½ feet per day of actual pouring time. Inasmuch as it required 96½ cubic yards of concrete for each lineal foot of the structure, the walls being 7 inches thick, 650 cubic yards of concrete were poured each day out of one mixer. On October 1 the cupola was finished and the tanks were ready to receive grain.

The grain handling facilities at Baltimore, somewhat cramped by the fire which destroyed the B. & O. Elevators last July, are adequate only because the elevators now operating are unusually speedy and flexible in their work. The Northern Central

cluding the spotting and removal of the car, taking from 7 to 10 minutes.

All the grain movements are directed from the grain dispatcher's office which contains a chart of every bin in the house. The dispatcher decides upon the route, and then with a telautograph instructs every man who is concerned in the movement. They all read the message duplicated in each operating station, and when each one has done what is required of him, he presses a button which lights a lamp in the dispatcher's office. When all the lights are lit he knows absolutely that the way is clear for the grain and that it will reach its destination. Then he starts it on its way.

By this system there is no chance of error; no danger of mixing.

Throughout the house are interlocking and safeguarding devices, so that no elevator can choke, no bin overflow, and if an elevator stops the belt is held securely so the loaded side cannot slip back and the feed to the elevator is stopped. The Zeleny Thermometer System registers in the dispatcher's office the temperature of all grain and if it shows inclination to heat it can be turned immediately or otherwise disposed of. The plant is electrically operated with 150 motors totalling 7,500 horsepower. While most of the motors are direct connected, those which are not, a total of 2,270 horsepower, are driven by Morse Silent Chain Drives.

The elevator has about nine miles of conveyor belting, there being 69 conveyors in all. The loading gallery along the pier, 900 feet long, has six conveyors 42 inches in width. The distributing and shipping conveyors above and below the storage units are 52 inches wide and there are five each, below and above, in all the units. All of the conveyors have automatic take-ups arranged with a countershaft and counter-weight on the wall.

The new annex has five conveyors above the tanks and five below. They pass through Annex No. 1 but are depressed in passing through so as not to interfere in the least with the grain movement in and out of No. 1. All of the conveyors in the cupola can be reached by the 13 cross conveyors so the utmost flexibility is attained. Each of the new conveyors is about 1,000 feet long and is operated by a 60-horsepower Westinghouse Motor with Morse Silent Chain Drive.

At times during the present season the question of seaboard storage is of prime importance. To a certain extent rail difficulties have operated to the advantage of the port elevators, for there would certainly have been serious congestion at all of them, if shipments could have been handled as fast as they were offered. While we have sold a large amount of grain abroad, buying has been somewhat intermittent, and in the slack periods grain has accumulated rapidly even with the comparatively slow car movement. At Baltimore the 1,335,000 bushels additional storage offered by the new Northern Central unit has been more than welcome, and its usefulness in the future seems to be without limit.

FEDERAL RYE GRADES ANNOUNCED

Uniform grades for rye have been formulated by the United States Department of Agriculture and are recommended to the trade for adoption. The grades are not fixed and established at this time under the United States Grain Standards Act because of lack of funds for their proper enforcement as compulsory standards, but the Department expresses the hope that they will be adopted by all grain inspection departments and by all other agencies engaged in handling rye.

The grades in present use in the different sections of the country are not uniform, and the varying requirements have given rise to considerable confusion in the trade. The Department feels that the universal adoption of the Federal grades will secure uniform grading and go far to eliminate the present dissatisfaction over the lack of standard grades. The Federal grades were formulated only after intensive investigations made by the Grain Division of the Bureau of Agricultural Economics relating to the various phases of the rye industry;

including production, and careful consideration of suggestions from grain dealers and grain inspectors.

The Federal grades divide rye into four numerical grades dependent upon condition, weight per bushel, moisture, damaged kernels, and foreign material other than dockage. Any rye failing to meet the specifications of any of the numerical grades is graded sample grade. These grades embody the dockage system, which is handled in the same manner as is dockage in the Federal standards for wheat.

The United States grades for rye are published in Department of Agriculture Circular No. 246. Copies of the circular may be obtained by addressing the Grain Division, Bureau of Agricultural Economics, United States Department of Agriculture, Washington, D. C., or any field office of Federal Grain Supervision.

FARM AND TERMINAL PRICES

The recent study made by the Department of Agriculture on "Farm and Terminal Market Prices," published as Bulletin No. 1083, fails to show the exorbitant profits popularly believed to fall to the middleman in grain marketing. The average difference between farm and terminal price per bushel on the total estimated crops of wheat is 17.2 cents; corn 9.7 cents; oats 3.7 cents; and the combined crops 9.6 cents.

Taking the matter of freight rates alone, the chief factor in the difference between farm and terminal price, the freight rate from Indiana and Illinois to Chicago average 8.5 cents per bushel but as only 5 per cent of Indiana's crop goes to Chicago and 25 per cent of the Illinois crop, it is evident that most of the grain arriving at Chicago carries a much heavier freight charge, probably nearly approximating the average at Minneapolis which is 17.3 cents per bushel.

The average cash value of the wheat, corn and oats crop at the farm for the period under observation, was \$3,337,752,157; the terminal value was \$3,812,602,269. After the freight is paid the terminal profit looks exceedingly small.

HANDLING GRAIN IN SACKS COSTLY

The unloading of sacked grain from cars requires 12 times the labor used in unloading the same quantity of bulk grain, recent tests conducted by E. N. Bates and A. L. Rush of the United States Department of Agriculture show. The tests also show that the cost of unloading sacked grain from a railroad car and piling the sacks in a warehouse is four times as much as the cost of unloading and placing in bins of an elevator an equal quantity of bulk grain. These tests were made at a modern terminal elevator and sack warehouse in Portland, Ore., and the detailed results are contained in Farmers' Bulletin 1290, entitled "The Bulk Handling of Grain," just published by the United States Department of Agriculture.

The bulletin states that the handling of grain in bulk is becoming universally recognized as the most economical grain handling system known. The bulk handling system has long been in use in the large grain producing sections east of the Rocky Mountains, but the Pacific Coast States have until recent years handled grain almost entirely in bags. Bulk handling is now growing in favor in the Pacific Coast States.

The chief advantages of bulk handling are said to be the saving in the cost of handling, the elimina-

tion of the cost of the bags, the prevention of waste from leaky bags, the ease and accuracy of inspecting the grain, the convenience with which bulk grain can be conditioned and cleaned.

The time and labor saved on the farm by handling grain in bulk are even more striking than the saving at terminal points, the bulletin states, giving as a reason that the handling of grain in sacks is a slow and laborious process, and usually no mechanical equipment such as hand trucks and sack piling machinery can be handled on the farm.

The saving through the elimination of sacks alone is estimated at from two to four cents per bushel.

Large terminal elevators, equipped for receiving, handling, conditioning, and delivering grain in bulk into vessels for export are now located at each of the Pacific Coast seaboard markets, and many cargoes of grain loaded from these elevators are now being successfully exported in bulk.

The bulletin gives the results of investigations regarding the economical phases involved in the bulk and sack methods of handling grain and describes the equipment necessary for the successful handling of grain in bulk on the farm. Copies of the bulletin can be obtained free upon request to the United States Department of Agriculture, Washington, D. C.

CAMPAIGN BRINGS RESULTS

There has been a persistent campaign by certain Ohio dealers for a number of years past to improve the quality of Ohio corn. A recent letter from E. T. Custenborder & Co., of Sidney, Ohio, who have been pushing the work in their territory, indicates that it is bringing results. The letter says:

We are pleased to advise you and the grain dealers generally that the Better Corn Campaign that we have been waging for lo these many years is now bearing good fruit.

On the 13th we loaded a car and consigned it to Cleveland and this morning we are advised that it had arrived and graded No. 3. We would be pleased to hear from other shippers from this territory who are getting a No. 3 grade, especially from Van Wert County. We are having plenty of rain here now. Wheat is looking fine. Corn husking is pretty nearly finished and the yield generally is the largest in years. Farmers are beginning to plow for spring crops.

E. T. CUSTENBORDER & Co.

GRAIN GROWERS CHIEF TURNED DOWN

Violation of a fundamental rule of the Chicago Board of Trade would be necessary to admit E. H. Cunningham to membership, according to a report by the Board of Directors to the sponsors of the applicant.

The report, made public by Secretary John R. Mauff, sets forth specific reasons for the refusal of membership to Cunningham, who is president of the U. S. Grain Growers, Inc., and of the U. S. Grain Growers Sales Company. His application was as head of the sales corporation.

Investigation showed, says the report, that the applicant's plan was to have the many members of the U. S. Grain Growers, Inc., "consign their grain to his sales corporation and enjoy the facilities of this exchange through the membership of Mr. Cunningham as president of this sales corporation."

Commissions from such sales, less cost of marketing, the report continues, would belong to the many members of the parent organization whether distributed or accumulated.

"That a violation of the commission rule of the association would inevitably result from such procedure was not denied by any one," says the report. "It may be clearly seen that this would be an unfair and impossible form of competition under which our other members, as receivers, and under obligation to a strict observance of this commission rule, could not survive. To be respected the rule must be enforced without discrimination.

"It would be inconsistent with one of the funda-

TABULATION OF FEDERAL GRADES FOR RYE, GARLICKY, WEEVILY, ERGOTRY, AND SMUTTY RYE

Grade	Condition	Minimum test weight per bushel Pounds	Moisture Per Cent.	Maximum limits of—			Total Foreign matter other than wheat Per Cent.
				(Damaged kernels—Heat damaged (rye and other grains) Per Cent.	Foreign material other than dockage Per Cent.	Foreign matter other than wheat Per Cent.	
1	Shall be cool and of natural odor....	56	13.5	2	0.1	3	1
2	Shall be cool and of natural odor....	54	14.5	4	.2	6	3
3	Shall be cool and of natural odor....	52	15.5	7	.5	10	5
4	Shall be cool and may be musty or sour	49	16.5	15	3.0	10	7

SAMPLE GRADE.—Sample Grade rye shall be all rye which does not come within any of the grades from Nos. 1 to 4, inclusive, or which has any commercially objectionable foreign odor except of smut, garlic, or wild onions, or is heating, hot, or otherwise of distinctly low quality, or contains small, inseparable stones or cinders. *Garlicky, weevily, ergotry and smutty rye shall be graded according to the grade requirements applicable if it did not have the particular objectionable condition, and added to the grade designation the word "garlicky," "weevily," "ergotry" or "smutty," as the case may be.

mental principles of this association if Mr. Cunningham and his sales corporation in this way enjoyed the concession of rebating without allowing the same concession to other members performing the same service for the producer. It would break down the commission rule, impair the value of service and membership, and lower the power to discipline as well as the ability to function properly in the great service imposed upon the association."

ESTABROOK TO ARGENTINA

Next to the crop reports of the United States and Canada, those of the Argentine are most important to the grain trade, and yet the official reports from that country have been notoriously inaccurate. Private reports are, on the whole, more reliable, but they get far less attention than the official estimates and the trade is largely at sea most of the time as to Argentina's place in the list of grain producing countries.

It is good to learn that a change is at hand. The Department of Agriculture of Argentina has requested the loan of Leon M. Estabrook, chief of the Division of Crop and Livestock Estimates of the U. S. Department of Agriculture, so that he may reorganize the crop reporting system of the Argentine. Mr. Estabrook has been given a year's leave of absence and will go to Argentina the first of the year.

BALTIMORE GRAIN EXPORTERS EXONERATED

Having resisted the efforts of the Federal Trade Commission to make a minute examination of their books and private papers in a study recently carried on by this Commission as to the methods and operations of grain exporters, the following Baltimore grain firms engaged in interstate and foreign commerce were cited to appear in the United States Court at Baltimore and defend suit instituted by the Federal Trade Commission to test the constitutionality of the Act of Congress of September 24, 1914, making it the duty of the Commission to gather information and to investigate the organization, business, practices, and management of such grain corporations: Baltimore Grain Company; Hammond, Snyder & Co., Inc.; H. C. Jones & Co., Inc.; C. P. Blackburn & Co.; Gill & Fisher; John T. Fahey & Co.

Of the above named only the first three firms were, under a writ of mandamus, asked to submit their books and records to the inspection of an agent of the Federal Trade Commission, and if the decision had been given in favor of this Commission, similar action would have been taken against the other firms named. Hearings in the case were held here early in November and after arguments were presented by counsel on both sides, Judge Rose, who was presiding, announced that he would take the case under advisement, and give his decision later. The verdict was rendered on November 20, resulting in a sweeping victory for the grain exporters, Judge Rose deciding that the Federal Trade Commission has no power to direct an unlimited examination and inspection of the books and papers of private concerns engaged in intra and interstate commerce.

A similar decision was rendered some weeks ago by the United States Circuit Court of New York in the case of the Federal Trade Commission versus the American Tobacco Company in which the decision of the Court was that "to grant the relief prayed for by the Federal Trade Commission would be to permit an unreasonable search and seizure of papers in violation of the Fourth Amendment, which it was not the intention of Congress to grant."

In his opinion of the case before the court Judge Rose said:

"There can be no question of the timeliness of an investigation into the causes of the marked difference between the prices received by the grain grower and those paid by the ultimate consumer. Many of the farmers have long been convinced that

in some way they were victimized by the railroads and the middlemen. The feeling of resentment has become so strong among them that, in some of the wheat-growing states, it has forced a realignment of political parties and has resulted in the demand for many laws and the enactment of a number of them, as to the wisdom of which there is still grave difference of opinion.

"For upward of a century and a half," Judge Rose

continues, "there has been no doubt that general warrants are forbidden."

In concluding, Judge Rose asks whether it is not a fair presumption that the inquiry was one "into the way the particular corporation itself conducted its business.

"I am satisfied it goes beyond any power which Congress can confer, in this way at least," he concludes.

Some Comments on Grain Sampling Terminal Grain Inspectors Discuss Proper Division of Grain Samples and the Question of Tolerances

LAST month W. L. Frank and R. L. Campbell of Sherman, Texas, presented the results of experiments which showed the "Sources of Error in Sampling Grain." The conclusions reached by these inspectors seemed to call for some discussion and a few of the leading inspectors were asked what they thought about it. As can be gathered from these comments there is considerable opposition to the proposed establishment of tolerances within the grades. The inspectors' letters follow:

INSPECTORS MUST USE JUDGMENT

In order for an inspector to grade grain right he must first of all get a correct sample of the grain. After he gets the sample he must be sure that the sample is cut down right to the 1,000 grams that he uses to determine the grade.

I think the rule should not be too technically applied. I also think that the inspectors should be allowed to use their judgment as how to apply the rules. I have always held and still hold that grain can never be graded according to its true value unless the inspectors are allowed to use their judgment in applying the rules.

G. H. TUNELL,

Minnesota Grain Inspection Department.

TOLERANCES WOULD COMPLICATE GRADES

The article in the AMERICAN ELEVATOR AND GRAIN TRADE of November 15, entitled "Sources of Error in Sampling of Grain," again substantiates the fact that has been recognized by the grain trade and also the Government in their investigation of grain grading prior to the establishing of the Standards, and the importance of uniform equipment and methods was again emphasized at the time of establishing the grain Standards.

The benefits derived from a modern mechanical equipment were recognized by the Omaha Grain Exchange Inspection Department for some time past, since we were one of the first exchanges equipped with the moisture testing machines and have kept in step with the progress of improvement in methods used in inspection work; therefore, have adopted and equipped our laboratory with the mechanical devices recommended by the United States Department of Agriculture.

We experience few variations that are determined by mechanical operation. The variations, to a large extent, involving the mechanical determinations, can be traced to the equipment not being properly cared for or due to the operator failing to properly operate. The need of careful operation of the various mechanical devices used in grain inspection, cannot be overly emphasized. We had recognized the uniform methods of handling samples in the laboratory prior to the establishing of the grain Standards and have incorporated the methods used by the Office of Federal Grain Supervision, to a large extent, using definite portions in all samples when making the various determinations.

Unevenly loaded cars occasionally are responsible for variations. These variations can only be overcome by the shipper when loading his grain, by spreading the various qualities of grain to a uniform depth throughout the entire car. By so doing, a representative portion can be secured when the sample is drawn.

Establishing a system of grain grading and permitting a tolerance would have a tendency to add

complications to the grading system now in practice and it would be reasonable to assume that the merchandiser of grain would be working on the basis up to a maximum limit of the tolerance allowed, and the variations would again present themselves, the result of which would be lowering of the Standards.

The high percentage of uniformity that is obtained between our Inspection Department and the office of Federal Grain Supervision would indicate that the variations which have been experienced in the past are fast diminishing, since the Supervision office sustained the inspections assigned on 80 per cent or better, on appeals during the past crop. This would appear to me as closely approaching the maximum percentage of uniformity that can be accomplished under practical grain grading, which has to contend with the many elements that are not under control of inspection.

GEO. B. POWELL,
Chief Grain Inspector & Weighmaster, Omaha
Grain Exchange.

ACCURACY DEPENDS ON METHOD

I am pleased to note that the experiments of Messrs. Frank and Campbell prove conclusively in their article on "Sources of Error in Grain Sampling" that there is only one correct method to use in order to comply with the Grain Standards Act. Methods other than those recommended by the Department of Agriculture in their various pamphlets and circulars, issued from time to time, can only result in haphazard grading and confusion.

As to providing a tolerance zone for the various factors, it would mean nothing more than increasing the limits, now in force, for each grade, and thereby necessitating a change in the Standards themselves.

P. D. CONNORS,
Chief Inspector, Buffalo Corn Exchange.

VARIATIONS CAN BE REDUCED

Mr. Frank and Mr. Campbell have shown very accurately in their tests the variations that may occur in samples prepared for grading, and that different grades with the present limitations, may be obtained from the same sample. I have found it absolutely necessary to have uniformity in the sampling as well as in the grading of lots of grain, and have not expected results in all cases to agree with in 1-10 of 1 per cent.

We use all the apparatus suggested by the Government for obtaining the best and most accurate results in sampling and grading, and find very little trouble in checking with our supervisor and other markets where equal care is taken in obtaining samples and grades. A system of tolerances or limits of variations will help uniformity of grades, more especially in line grades.

I have reduced variations in my department by holding monthly meetings of inspectors and samplers and by getting together, having all inspectors work their samples in the same manner and all samplers draw their samples in a like manner, have very few grades changed on reinspection or appeals.

ALLEN A. BREED,
Chief Inspector, Milwaukee Chamber of Commerce.

PLANS are on foot to erect grain elevators in India to take care of new districts recently opened to irrigation. Even the great grain port of Karachi has no bulk grain elevator.

The Lighting of Grain Elevators

Some Valuable Recommendations on Efficient Plant Lighting Based on a Comprehensive Survey of Typical Elevators

By W. H. RADEMACHER and ERNEST L. DEE*

ALTHOUGH electricity as a means of artificial illumination has been almost universally adopted in the grain industry, there still remains room for substantial improvement in the field of light application. True, there are some plants which are illuminated in accordance with the best recognized practice, but by far the majority and those particularly of old standing, are still far from conformity with modern standards.

The usual procedure is to apply bare incandescent lamps, usually Carbon or Mazda B in the 25,

TABLE 1.—Lighting Statistics Compiled from Inspection of 100 typical Elevators, Ranging from 60,000 to 4,500,000 Bushels Capacity

Kind of Lighting	
Plants using Oil Lanterns.....	1
Plants using Gas.....	0
Plants using Electricity.....	99
Types of Lamps	
Plants using all carbon lamps.....	21
Plants using all tungsten lamps (vacuum).....	42
Plants using all tungsten lamps (gas filled).....	1
Plants using carbon and tungsten vacuum.....	26
Plants using all carbon and tungsten gas filled.....	5
Plants using carbon vacuum and gas filled.....	4
Plants using oil lanterns.....	1
Use of Reflectors	
Plants using no reflectors.....	85
Plants using some reflectors.....	11
Plants entirely equipped with reflectors.....	4
Vapor Proof Globe Protection	
Plants using no V. P. globes.....	41
Plants partially equipped.....	46
Plants entirely equipped.....	13
Types of Reflectors	
Plants using all drop cords.....	53
Plants using all ceiling sockets.....	2
Plants using ceiling sockets and drop cords.....	9
Plants using ceiling sockets and wall brackets.....	5
Plants using drop cords and wall brackets.....	18
Plants using drop cords, ceiling sockets and wall brackets.....	13
Types of Wiring	
Plants using all conduit wiring.....	51
Plants using all open wiring.....	32
Plants using all open and conduit.....	17
Lamps	
Average number of lamps per plant.....	230
Average size lamp used (watt).....	40-50

40, or 60 watt sizes on drop cords, at intervals of about 20 feet and a hanging height of approximately 6 feet above the floor. The resultant distribution of illumination is very non-uniform; the in-

tensity is low, much light being wasted over upper areas where it accomplishes no useful purpose; the light sources which are in range of vision are decidedly uncomfortable and the breakage risk and consequent fire hazard are very great. Some of the more modern plants apply low wattage lamps in vapor proof globes at more frequent intervals, sometimes mounting them on the supporting

columns, using a rigid mounting. This practice is substantially better and in plants of the more modern type with light surroundings, fairly good illumination is secured. There is undoubtedly a large field in this industry for the use of higher wattage lamps in conjunction with vapor-proof globes equipped with reflectors and, where necessary, guards affording protection from mechanical injury, as shown in the illustration on this page. The economy, minimization of fire hazard, and improved lighting effect thus procurable should more than justify their



LIGHT FIXTURES ADAPTABLE FOR GRAIN ELEVATORS
Typical vapor-proof reflectors of a design well suited for the illumination of dusty areas such as are encountered in grain elevators and flour mills.

installation. A well-designed unit is not unduly susceptible to the accumulation of dust and many now on the market are satisfactory.

Table 1 indicates the prevailing practice in typical grain elevators. The practice in mills parallels this quite closely.

Undoubtedly the apparent present poor practice is due largely to the rapidity with which developments have taken place in the art of illumination combined with a lack of appreciation by the industry of the benefits of proper illumination. The introduction of the gas filled or Mazda C lamp combined with the development of more efficient and scientifically correct light controlling equipment has made possible more economical and effective illumination than was possible with the Carbon or Mazda B lamp and the more or less haphazard reflecting equipment of the past.

The benefits of a proper intensity of well diffused

are high and where untidiness is easily visible greater care is always taken by those responsible for the possible existence of such conditions.

Furthermore, the workers themselves are likely to be more particular in their personal cleanliness. The general aspect of an interior under good lighting in itself conveys the idea of cleanliness and this reacts eventually upon those working beneath the lighting, making them more careful and more particular of their surroundings and themselves.

B. Safety

Proper intensities of well-distributed light make it unnecessary for the eye to continually readjust itself in moving about from place to place, enable one to perceive clearly at all times, and eliminate the possibility of misjudging the placement of objects, etc. Accidents, such as are due to stumbling, falling and contact with moving machinery are thereby greatly reduced.

C. Increased Production And Reduced Spoilage

In many operations, we find that comparatively close visual application is necessary. It is a known fact that good light quickens visual perception and that further since the eye sees more readily, other sub-conscious movements occur much more rapidly, increasing output. Because the eye sees more clearly mistakes in machine setting, grade discriminations, and the like are eliminated and spoilage thus reduced.

D. Indirect Effects

The effect of good lighting on the morale of those working beneath it, cannot be overestimated. The cheery atmosphere which results from good lighting makes for a more alert, conscientious and enthusiastic worker. In a gloomy atmosphere, grouchiness and despondency develop, followed by carelessness and general laxity.

Good lighting, because it enables quick and easy perception and eliminates shadows in which workers may lurk, facilitates the supervision of workers and greatly minimizes this problem.

GENERAL REQUIREMENTS

Grain elevator and flour mill interiors are characterized by their exceptional dustiness and one of the biggest problems confronting the operating men of today is that of dust prevention and removal. Much money and effort has been devoted to the elimination of this evil with varying degrees of success. Dust collecting and removing systems are in use in most modern houses, but even so, during the periods of grain movement, their interiors become practically enveloped in dust clouds. From the standpoint of artificial illumination this presents a serious problem.

The flying particles of dust naturally lodge on all surfaces presented to them. Lighting units are no exception and they become rapidly coated with a dense layer of more or less inflammable and opaque dust. In going about a plant, it will usually be found that many of the lamps indicate their presence solely by a mere glow. Aside from the standpoint of light absorption, the prevalence of dust presents another serious problem, that is one of fire hazard.

As a result of the many explosions which occurred in grain elevators during the period of the World War, the United States Grain Corporation, under whose supervision the grain handling was then being carried on, in co-operation with the Bureau of Chemistry of the United States Department of Agriculture, conducted a dust explosion campaign and a survey of the causes of grain dust explosion.

One of the inferences drawn from this survey was that the incandescent lamp at times presented a fire hazard. The leading lamp manufacturers, upon being acquainted with this fact, inaugurated a survey of their own, with a view toward finding out if it really was dangerous to use incandescent lamps in such interiors and how they could best be applied with safety. It was found that fires or explosions which may be caused by incandescent lamps in dusty atmospheres are of two kinds. First: In extreme cases, fires resulting directly from the ignition of dust accumulating on the lamp bulb.

Second: Explosions resulting from the accidental breakage of lamps in a dusty atmosphere contain-



PLENTY OF LIGHT IN THE GALLERY

A night view of the Texas floor in a modern house showing the conveyors over the grain tanks. This floor is illuminated with 50 watt Mazda B lamps in wire lamp guards 14 feet above the floor and 18 feet apart—giving from 1 to 2 candles of illumination.

tensity is low, much light being wasted over upper areas where it accomplishes no useful purpose; the light sources which are in range of vision are decidedly uncomfortable and the breakage risk and consequent fire hazard are very great. Some of the more modern plants apply low wattage lamps in vapor proof globes at more frequent intervals, sometimes mounting them on the supporting

and distributed general light cannot be overestimated. Briefly these may be classed as follows:

A. Improved Sanitation

Cleanliness is of the first order of importance in the handling of food products as they are distributed widely and if contaminated in any way are liable to carry disease to all parts of the world. That good lighting means cleanliness can be readily appreciated, for with a high intensity of well-diffused light refuse and foreign matter is not likely to accumulate, for where the chances of detection

*The authors of this article are illumination experts connected with the staff of the Lighting Service Department of the Edison Lamp Works, Harrison, N. J. The half tone illustrations are made from unretouched night photographs taken particularly for this article.

ing the proper proportion of air and dust to form an explosive mixture.

By the proper application and protection of lamps, the possibility of trouble due to either of these causes may be eliminated. The hazard attending the use of high wattage lamps in general overhead lighting systems is far less than that resulting from the careless use of small lamps on drop cords, as prevails today.

LIGHTING IN ELEVATORS

The demands for lighting in the grain elevator, are for safety, for the carrying on of rough operations, such as the setting of belt trips, grain spouts, etc., and for some little closer visual work as the reading of scales. Intensities of from 0.25 to 1 foot-candle* are today being universally employed.

These values of illumination are unnecessarily low and a substantial increase to intensities in the order of from 1 to 3 foot-candles should be adopted, for by so doing working conditions would be materially bettered, in fact to such an extent that the increased wattage necessary could easily be justified. Furthermore, the application of Mazda C lamps in suitable reflectors equipped with vapor proof enclosing globes will make possible the procurement of a more uniform, efficient, and comfortable light distribution.

There are some areas in and about the average elevator which require other than general lighting, these being the scales, bins, freight cars, docks, and ship holds.

In front of each hopper on the scale floor (the point where the incoming and outgoing grain is weighed), is a beam scale calibrated with figures varying in height from one-fourth to one-half inch. It is essential that these scales be read accurately and rapidly. The proper kind of illumination undoubtedly is an important adjunct to the attainment of these ends. Present practice consists for the most part of using one or more low-hanging bare lamps directly in front of the scales and usually on the normal line of vision. This procedure is far from being good and a practicable solution of the lighting problem seems to be to mount one or preferably two dome shape reflectors, carrying 75 watt Mazda C lamps, about 3 feet above the level of the arm.

In the lighting of the grain storage bins, we have a rather interesting problem, and one whose satisfactory solution is an objective which has often been the hope of many operating men. Unfortunately, most operators have held hope but have taken no real steps towards investigating ways and means of attaining a satisfactory solution. It is frequently desired to look into these bins for the purpose of determining grain level. It also becomes necessary at times to enter the bins for the purpose of cleaning. The theoretical method of establishment of grain level, is by means of a plumb line, while actual examination is made under the illumination furnished by a carbon or Mazda B lamp of low wattage mounted on a drop cord, in fact, in 99 out of the 100 plants inspected and cited in Table 1 this practice held.

Unfortunately the common tendency of workers at these points is to use the lamp and cord as a plumb line. The lamp and cord are lowered into the bin and the cord is quite frequently chafed or broken, causing short circuits. Furthermore, they are often left hanging in the bin only to be covered by grain at some later time. This is obviously an extremely dangerous practice and there are on record cases of fires and explosions which it is claimed can be directly traced to this cause.

The ideal method of lighting these bins would be by means of a portable unit which could be mounted at the opening, projecting its rays into the bins and lighting the interior to an intensity of one-half to one foot-candle. During the movement of grain, one of the most usual intervals of inspection, the interiors of these bins are enveloped in dust clouds. The lighting must penetrate them.

Apparently the most practical unit for this

service is a searchlight carrying a standard voltage lamp. One of the large railroad export elevators is now using such a scheme to its entire satisfaction. Outlets are situated at convenient points over the bin floor and units which are hung at readily accessible points may be taken when needed and located at whatever bin requires light. It becomes unnecessary for lamps or current carrying parts to be lowered into the bins themselves, and ample light is had throughout the interior even under the most adverse conditions.

It quite frequently happens that ships must be unloaded or loaded at night, in which event artificial illumination of some means must be had. For



A SACK STORAGE ROOM
Sack Storage Room and Warehouse lighting accomplished by using 75 watt Mazda C lamps in enclosed vapor-proof prismatic or clear fixtures. Intensity here averages 3 foot-candles.

exterior illumination of this character it is the usual procedure to mount flood lights on convenient parts of the building, training them on the areas where illumination is required. For lighting the ship holds, clusters of 60 watt lamps in a dome steel reflector fitted with a wire protecting guard and arranged for convenient plugging into receptacles mounted along the deck side of the building are usually employed, while lighting the interior of cars is cared for in a somewhat similar manner. Undoubtedly a better effect and more efficient illumination could be secured at these points by the utili-

ing is so little and the benefits to be derived are so great that it behooves every operator to consider the lighting relations in his plant and what an improvement in existing conditions will do for him.

"JIM DUNN"

BY HOOZUS

Jim Dunn, who runs the elevator at Sperry Siding, says: "These here young farmers that are allus a'kickin' 'bout th' elevator man, nowadays, oughta had some dealin's with th' old timers in th' bizness. There was ol' Al Fleet, for instance, that usta take a double handful out o' each bag t' inspect it, an' then dropt it int' a barrel that he kept handy. Th' ol' skinflint usta make good wages out o' them samples.

"One day Lynn Sprout drove in with a big load o' wheat, and Al he took his reg'lar toll out o' each bag. Lynn he didn't say ennything jest then; but when th' wheat was all weighed up an' he had his money, he says t' Al, he says: 'Al! I reckon I'll take a look at that there Clover seed ya got in them bags over there.' There was 'bout 25 of 'em, all filled an' ready t' be sewed up. Lynn had one o' his wheat sacks in his hand, an' as he come t' each bag he took a cupla big handfuls an' dropt 'em in his sack.

"When he started t' go 'way with it Al says t' him, he says: 'Say, Lynn, don't ya know ya've got enuff seed there t' sow a cupla acres?"

"I reckon I have," says Lynn, 'but I figger ya've got enuff o' my wheat t' keep ya in bread a cupla months, so I calk'late we're 'bout even. S'long!"

LITTLE TIPS FROM "JIM DUNN"

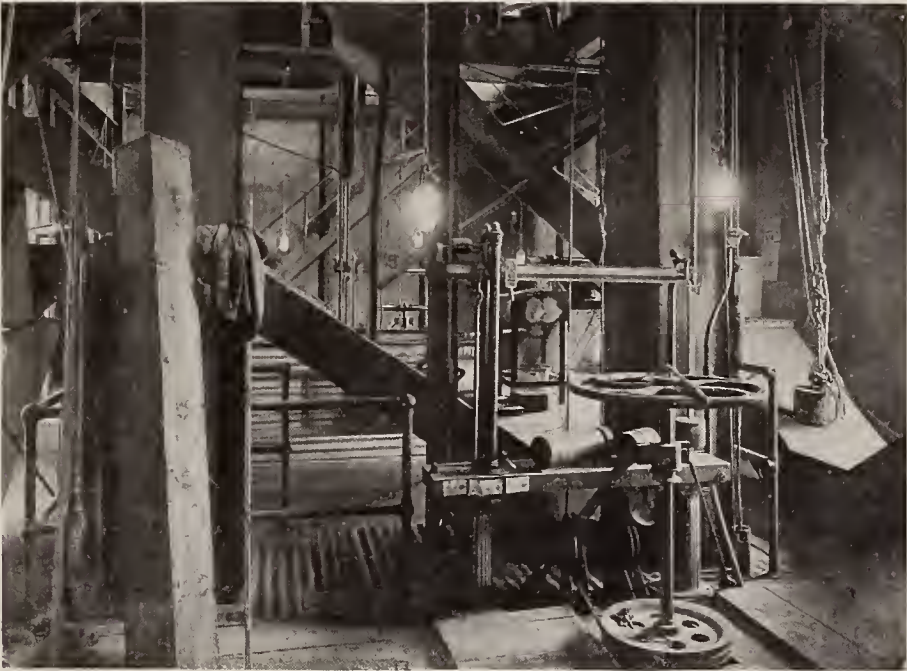
'Cause your weights ain't a'holdin' out on th' other end, ain't no reason for you t' be a'holdin' out on this end.

Some fellers know jest how t' run yur bizness, but have a hell of a time a'tryin' t' run their own.

They'll have t' quarantine th' farmers' elevators afore long. With so much sickness amongst 'em it begins t' look like a plague.

If ya can't get cars "spotted," don't wait for th' spirit t' move 'em. Get a up-t'-date car-mover an' do it yourself.

Ya can't allus sell at th' top, an' ya shouldn't



MISAPPLIED LIGHTING AT THE SCALES
Day view of the scale floor in a grain elevator illustrating a common misapplication of lamps. The bright light sources in the direct line of vision make it extremely difficult to read the small figures on the scale arm.

zation of a dome-shaped vapor proof unit equipped with a guard and a Mazda C lamp, preferably bowl enameled, of a suitable wattage.

The following tabulation indicates the recommended lighting practice for grain elevators:

Section	Type of Illumination	Intensity Ft. Candles
Machinery floor.	General	3-4
Garner floor.	General	1-3
Weighing floor.	General and Local	1-3, 8-10
Bin floor	General and Local projectors	1-3, 1/2-1
Cleaning	General	1-3
Conveyor		
passageway	General	1-3
Warehouse	General	1-3
Deck and dock.	General (floodlighting)	1-3
Cars and		
ship holds.	General	3-4

In the industry as a whole the cost of right light-

never sell at th' bottom; but if ya buy at a profit an' keep it sold, ya won't have t' worry 'bout either.

Good accountin' is a great thing; but nothin' nor nobuddy ever beats a cash bizness.

Th' man who takes a trade paper has it over th' other feller both ways: he reads what's goin' on in th' bizness, an' he reads 'bout th' other feller goin' out of it.

Owin' t' th' high price o' coal an' Mr. Volsted a feller might's well go t' bed early this winter; but he'll sleep a lot better if he's got enuff insurance on th' old house.

*The foot candle is the unit of measure of intensity of light analagous to the degree which is the unit of measure of temperature. A foot candle is the intensity of light which would exist on a surface 1 foot distant from a point light source of one candle power. Light intensity can be measured by means of a simple device known as a "Foot Candle Meter."

CAR SHORTAGE-SPOILED GRAIN

BY TRAVELER

As far back as most grain men can remember, a prolonged period of car shortage has always been followed by a movement of grain which was either out of condition when it arrived, or had been previously,—so that the terms "car shortage" and "spoiled grain" have almost become synonymous.

While shortage of cars contributes largely to grain getting out of condition, it does not follow as an inevitable result, but can usually be traced to negligence or ignorance on the part of the elevator man. There are a few exceptions when he is unable to help himself, but these can be easily enumerated.

Drop in to see a careless elevator man, during one of these periods, and ask him how business is. He will usually answer: "All shottoell! Not a thing doing. Can't get cars, and here I am sitting here with my elevator full and nothing to do but stick around. I'd a whole lot sooner be busy."

If you would go upstairs in this man's house, and walk over the top of the bins, you would be pretty sure to smell warm grain. Now if you came downstairs again and told this elevator man, you could gamble on him saying: "That can't be. You got another guess coming. That grain was all in fine shape when I put it in there. It couldn't get out of condition so quick."

Then you ask him if he's been in the habit of drawing a hopperful out of several bins occasionally. "Hell no!" he'll say, "what would I want to do that for? Don't I know it's all right?"

After more argument along this line, he is finally persuaded to draw down a hopperful. When he attempts to do so, the spout does not work properly, and it is several minutes before any grain comes at all. When it does, the elevator man is surprised to find that it moves sluggishly and is quite hot—some of it, in fact, comes down in chunks.

Then Mister Elevator Man gets busy. He's going to run that right away! He'll have that cool again in no time, and you would never know it had been hot! So says Mister Elevator Man. But the expert knows that "the scent of the roses will cling 'round it still" no matter how many times it has been run. He also knows that if any attempt is made to mix off this tainted grain with good grain, it will imperil the grade of the latter, and thus cause a serious loss on the contents of several cars. Any way he figures it he must now stand some loss on account of this spoiled grain. Aside from the actual loss on the grain, there is the additional expense he is to in running his machinery while getting it cool again.

Now the elevator man who avoids all this pursues an entirely different plan. To begin with, he keeps plenty of good brooms in his house—and uses them. He makes a practice of keeping his elevator clean at all times. Dust and cobwebs are not allowed to accumulate to form breeding places for vermin. Not only are the floors, walls and ceilings kept free from dirt and dust, but the interiors of the bins are carefully swept each time they are emptied. With these preparations, the elevator itself is in shape for the grain when it comes from the farmer.

The next point is to see that the grain the farmer brings is in proper shape to be taken into the elevator. There is some which is not. If it is harvest time and the grain is too tough, it is sent back. Such grain will only become worse in an elevator. If grain is already hot, and badly infested with weevil, it is also sent away. No use buying trouble and taking it into the house.

When any considerable quantity of grain has accumulated in a bin, it is examined every few days by drawing down a hopperful. The average scale hopper holds at least 50 bushels, and this amount drawn out of a 1,000-bushel bin will give a pretty good test of the contents of the bin from top to bottom. If the grain is found to be all right it is elevated back into the bin; but if, on the other hand, it shows signs of getting out of condition, the entire contents is at once re-elevated

into another bin and then moved every few days if necessary. If weevil are in evidence, the grain is at once put through the mill and as many as possible removed. Wherever possible, cool, dry days are chosen for running grain.

Ventilation is another important thing which the careful elevator man looks after. He sees that the cupola and other upper windows are open on every day that the weather will permit.

There is still one more point that the wise elevator man never overlooks. No matter what the conditions, he never fails to keep an empty bin in his house. Without this precaution, all the rest would be useless, for then he would be unable to shift his grain.

When grain has been looked after in this manner, the car shortage can continue indefinitely, and when relief does finally come, it will be found that the grain is in shape to be shipped anywhere.

MARKET EARLY AND SAVE MONEY

The Publicity Committee of the Minneapolis Chamber of Commerce recently issued a statement, compiled from the official records of that market, showing that, over a period of 29 years from 1885 to 1914, the average price of No. 1 Northern cash wheat, during the four fall months was only 4¼ cents less than during the four spring months of the same crop year. The difference in No. 2 Northern was 4.32 cents.

This slight advantage in price for the holder of the grain would not have paid the actual cost of carrying it, either on the farm or in an elevator. The reason that this slight difference is possible is in the benefit derived from future trading. The Committee comments on this benefit as follows:

"The heavy marketing of grain in the Northwest during the first four months of the crop year would no doubt result in a severe depression in the price during that period if it were not for the system of 'future' trading which prevails in the leading grain exchanges. The system of future trading, and that system alone, has made it possible for many years for the grain producers who, either from necessity or desire, marketed their grain shortly after the harvest, to receive on the average as good a price one year with another as the grain producer whose resources permitted him to market his grain in the late spring and summer following the harvest. Much of the agitation against grain exchanges is based upon absolute misconception of the facts. Instead of 'future' trading having the effect of depressing the price of grain in the fall it has exactly the opposite effect—namely it sustains the price during the heavy crop moving period, and year after year as the following statement shows it maintains the price of grain during the heaviest crop moving period within about five cents a bushel of the average price during the following summer. The general effect of 'futures' markets is to prevent abnormally low prices during the heavy crop movement, and abnormally high prices during the period of the lightest crop movement. The 29 years mentioned were on the whole normal years.

"Recently there has been considerable adverse legislation enacted by Congress and the state legislatures affecting grain exchanges, and especially future trading. The effect of this legislation has been to seriously injure these futures markets and to that extent to impair their efficiency. This adverse legislation, as stated before, is mainly based upon an absolute misunderstanding of the facts. Those who have favored this legislation have labored under the false impression that the price of grain was depressed during harvest time, and that the grain producer who was compelled to sell his grain shortly after harvest was also compelled to sacrifice it in the matter of price.

"The prices paid for grain in the Northwest have been a matter of record for many years. An examination of these records will dispel this misapprehension. During the 29 years mentioned future trading was carried on freely in the leading grain exchanges of this country. The actual effect of this future trading upon prices is a matter of rec-

ord. That record shows that the actual effect of future trading upon the price of wheat in the Northwest during the 29 years mentioned was on the average to maintain the price of wheat during the heaviest crop moving period within 5 cents a bushel of the price of wheat during the period of the lightest crop movement following. The effect of future trading during the 29 years mentioned was to enable the northwestern wheat producer to market his wheat immediately after the harvest during all the 29 years mentioned, and at the same time to receive on the average in every respect as good a price as if he had marketed his wheat each year during the period of the lightest crop movement.

"The system of future trading should be judged by its effect. The effect of future trading during the 29 years mentioned is reflected in the price of grain during that period. These prices are preserved in permanent records, and these records show that no group in the community should be so vitally interested in the preservation of the 'futures' markets as the northwestern grain producer."

PASTURING WHEAT

Much valuable feed may be secured this fall and winter from pasturing wheat without material injury to the wheat if judiciously done. The value will, of course, depend on many things, such as the growth of the wheat and the scarcity of other feed. For the farmer who has plenty of other pasture there is little to induce him to pasture his wheat and probably as a rule he had better not. But the man who is short of feed, especially if he has dairy cattle, can save considerable expense and the effect on the wheat will scarcely be noticed.

The general opinion of farmers and the results of experiments seem to agree rather closely in showing that wheat is rarely benefited by pasturing. Sometimes on rich bottom lands—where wheat is not often grown—pasturing will prevent an excessive growth of straw and reduce to some extent the danger of lodging. Late spring pasturing, however, will delay the crop, cause it to ripen late and almost invariably reduce the yield. Pasturing too closely or before the plants get started and pasturing when the ground is wet will usually cause more injury than will be offset by the value of the pasture. Care must also be exercised in turning cattle onto wheat pasture for the first time on account of danger of bloating.

Soft wheat as a rule furnishes better pasture than Hard wheat because of its rank and more rapid growth. The difference, however, is not sufficient to justify growing Soft wheat where Hard wheat is considered a better variety.

Experiments at the Kansas Station from 1888 to 1896 give valuable indications of what may be expected from pasturing, so far as the effect on the wheat is concerned. In these experiments, stock was not allowed on the fields until the wheat was well started, and never when the ground was wet. Neither were they pastured close enough to cause any apparent injury. The average yields for five years were as follows:

Fall pastured.....	26.3 bushels per acre
Spring pastured.....	27.8 bushels per acre
Not pastured.....	29.6 bushels per acre

A similar experiment at the Oklahoma Station for five years gave the following results:

Heavily pastured.....	8.4 bushels per acre
Lightly pastured to March 1....	11.6 bushels per acre
Not pastured.....	12.7 bushels per acre

Cattle men value wheat pasture at from 25 cents to \$2 per acre, depending on the wheat and the price of feeds. Most cattle men and wheat growers in the drier portions of the wheat belt of the Southwest consider any wheat pasture, secured in the fall, as that much clear gain. They claim that judicious pasturing does not injure the wheat and if they get some pasture they are certain of that much which may be all they will get out of the crop.—*Bulletin of The Southwestern Wheat Improvement Association.*

WOULD not want to be without the AMERICAN ELEVATOR AND GRAIN TRADE. Consider it best of old line publications.—L. E. McAtee, Rantoul, Ill.

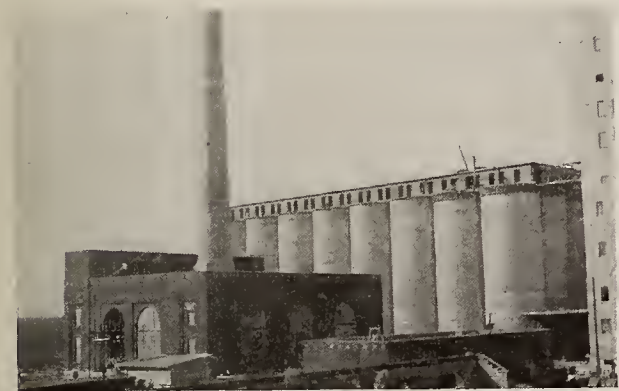
December 15, 1922

North Dakota's Experiment at Work

The New State Owned and Controlled Plant at Grand Forks Starts Out with Splendid Equipment and Under Favorable Auspices

THE experiment of the state owned and operated grain elevator and flour mill has gone beyond the point of argument; they are actually in operation at Grand Forks, N. D., and the results of that operation will be watched with close attention by grain growers, shippers and receivers in all parts of the country. C. E. Austin the manager for the entire plant, and B. L. Simmons who will have charge of the elevator, have a great responsibility, for every person in the country with socialistic leanings will look to them to make the experiment a success, and they can be quite sure that theirs will be the blame (and not the principle involved) if results do not come up to the highest expectations of those interested.

Some of the advocates of public owned industry have extravagant ideas of the benefits to be derived; nothing short of the millenium in fact.



POWER HOUSE AT GRAND FORKS, N. D.

But it is not the extremists on either side who will be satisfied; the management will be called upon to show whether or not a state-owned project can be operated as efficiently and economically as a private enterprise. Just so far as they succeed or fail in this respect, and no farther, will the farmers of North Dakota be helped or hindered.

The plant is located on the main line of the Great Northern Railroad with easy access to the Northern Pacific. It is easily accessible to a region which produces from 30,000,000 to 50,000,000 bushels of wheat a year. The present elevator has a capacity of 1,750,000 bushels, but the expectation is that eventually storage capacity for 6,000,000 to 8,000,000 bushels will be required. The elevator will be open to buyer and seller and will furnish complete hospital and mixing facilities. This spikes one of the big guns of the extremists at once, for there are a considerable number of farmers who

believe that mixing grain is iniquitous inasmuch as mixing tends to keep prices at the minimum for each grade deliverable on future contract.

The Charles L. Pillsbury Company of Minneapolis were the engineers in charge of design and construction, and also acted as purchasing agents through H. G. Lykken, chief engineer. The Fegles Construction Company of Minneapolis were the general contractors and E. McCullough has been the resident engineer on the project since its inception.

The headhouse is 60x120 feet on the ground plan and 194 feet high above the mat. The bins are 60 feet high and there are 140 of them each with a capacity of 2,500 bushels. The equipment of the headhouse consists of three receiving legs and four shipping legs, all of which have a capacity of 15,000 bushels per hour and are arranged in a row down the center of the house. In addition there are two 8,000-bushel legs for screenings. The receiving and shipping legs discharge into 2,500-bushel concrete garners with steel hopper bottoms. There are 14 of these and each leg commands four garners. Each garner is connected with at least two legs, the receivers and shippers using garners in common.

There are two 2,000-bushel shipping scales located two stories below the garners so that grain may be delivered to them from several garners. The receiving scales, of which there are six, are located in the track shed under the receiving pits. The receiving shed is located between the elevator and mill. It contains six receiving pits in pairs. Directly under the grating is a shallow receiving hopper with interlocking gates. The grain is received directly into the scale hopper, resting on Fairbanks-Morse Scales. The scale beams are located between the tracks and a small scale house provided for each pair of receiving ribs. The scales and receiving hoppers are located in a basement occupying the full area of the receiving shed. Here also is the car puller. In addition to the two receiving tracks, a third track in this shed serves the mill.

The elevator has a fine cleaning equipment consisting of six No. 11 Monitor Receiving Separators; one No. 9 Monitor Screenings Separator; one Monitor double-ended Flax Machine; one Invincible Oat Clipper; and a battery of eight Carter Oat Separators. There is a complete dust collector system and sweeps discharge to a separate dust house. There is a 1,000-bushel Morris Suction Type Dustless Drier.

The cupola is arranged with a view of installing a large amount of cleaning machinery, the installation to be made as required. The machinery

contract was divided equally between the Weller Manufacturing Company and the Webster Manufacturing Company.

The storage annex consists of 32 circular concrete bins, 30 feet in diameter and 100 feet high above the mat, arranged in four rows of eight each. The bins, both circular and interstice, have a combination concrete and steel hopper bottom and a concrete slab over the bins forming the floor of the gallery. The bins are served by three 42-inch belts in the gallery and four 42-inch unloading belts.

The shipping shed is located between the workhouse and bins, and contains two tracks with car loaders. The shed is roofed over with a concrete



HEAD HOUSE OF THE NORTH DAKOTA ELEVATOR

slab and has a concrete floor flush with the top of the rails. A Strong-Scott Car Puller, capable of handling 25 cars is provided.

The house is operated electrically throughout with Allis-Chalmers Motors. All main legs are provided with 100-horsepower motors with rope drive to countershaft. The countershaft is provided with a clutch with chain drive to head shaft. All legs are provided with back stops. The control system is operated from a central switchboard. The control man can start the various motors, spout the head discharge and turnheads from his stand on the control floor. A pneumatic tube is provided for ticket distribution with a bell and electric light signal system. In short the elevator is equipped with every possible convenience that could promote economy of operation and the safety of the plant and its operators.



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We solicit correspondence upon all topics of interest connected with the handling of grain or cognate subjects.

Official Paper of the Grain Dealers National Association and of the Illinois Grain Dealers Association

CHICAGO, ILL., DECEMBER 15, 1922

A BLOW AT A GROWING PROFESSION

PROFESSIONAL investigators, who are getting so thick down in Washington that one can hardly take a step without squashing one, recently received a jolt which may shake some of them loose from their jobs. Two United States District Courts have ruled that the Federal Trade Commission has no constitutional right to indiscriminate examination of the books of corporations and individuals, as it is expressly contrary to the spirit of the Fourth Amendment to the Constitution.

The seriousness of this blow to Federal office holders is apparent when we recall that there are some 40,000 of them connected with the various commissions, bureaus and investigating committees, appointed by Congress within the last decade. Establishing bureaus and commissions has become the favorite indoor sport of Congress. Usually a nominal sum is appropriated from the public treasury to cover the first cost. The next appropriation bill contains a much larger sum for these baby bodies, and before we know it the bureau or commission has become a permanent wart on our body politic, and our Federal Government is rapidly degenerating into a mere functioning of bureaus. In short we are becoming a bureaucracy, and the situation is serious.

The exporters at Baltimore and the P. Lorillard Company in New York have performed a patriotic duty in successfully resisting the inquisition of the Federal Trade Commission. Their leadership should be accepted by business men of every branch of industry, and each new encroachment on

personal right should be fought to a finish.

These 40,000 investigators almost invariably approach a business firm with the idea that such firm is guilty of unethical business methods if not actual violation of the law. You know and we know that business is not run that way, in spite of the outpourings of demagogues to the contrary. Business is inherently honest. There is no reason why the burden of proof should be upon it. If a business or an individual is crooked, it is up to the properly constituted officials to bring it to book, prove its guilt, and put it out of business or in jail where it belongs. But certainly there is no place in America for the demagogue or the commission which assumes that success and crookedness necessarily go hand in hand. The grain trade has heard enough of that sort of talk and it is high time to talk back. The Baltimore exporters have started it and deserve our thanks. Let us have more of it.

BILL TO SUPREME COURT

AS THIS issue is in the mail the Supreme Court begins the hearing of evidence in the injunction suit brought by the Chicago Board of Trade to test the constitutionality of the Grain Futures Act. Judge Carpenter of the district court of Illinois dismissed the bill for a temporary injunction, but continued in force the temporary restraining order preventing enforcement of the law. He granted an appeal to the Supreme Court, and denied the petition of the American Farm Bureau Federation to intervene as a co-defendant with the Government.

The Supreme Court advanced the case on its docket and evidence will begin to be taken on December 15. There is a great deal of evidence to be submitted for the validity of the Act rests upon the academic question presented in preamble to the Act, as to whether trading in futures is harmful. The Chicago Board has testimony from the leading economists of the country to prove that future trading is an advantage to the farmers.

It may take some weeks or even months to hear the evidence and prepare the decision. In the meantime the grain exchanges will function as usual. Several of them have obtained restraining orders pending the outcome of the Chicago suit, so there will be no interference of the normal operation of trade in grain.

NATION BUILDERS

AMERICA is great only to the extent that it produces great men. The builders of the nation are the men who do things a little better than their fellows. Their heritage of achievement is shared by the whole country and their example is an inspiration for generations to come. Such men are found in every industry and they spring from every walk in life. No class has a monopoly of brains and no calling is peculiar in the development of that energy and perseverance by which dreams are made realities. Farm-

ing has produced its nation builders as well as the fields of railroads, electricity, engineering and manufacturing. Two men who can easily qualify as builders were conspicuous in the awards made at the International Grain and Hay Show at Chicago this month. We refer to A. W. Jewett, Jr., of Mason, Mich., and John Howell of Montrose, Colo.

Mr. Jewett won the National Hay Association trophy for the best bale of hay exhibited at the show; he won the first award for Timothy; second for Red Clover; second for Soft Red Winter wheat; fourth for rye; fifth for Alfalfa; and seventh for barley. These awards were against competitors from the entire country and Canada. In addition he won regional awards: First in White Winter wheat; and fourth each in 10-ear Yellow corn, Flint corn, and oats.

Mr. Howell took first in Hard Red Winter wheat; first in White Spring wheat; third in Durum wheat; fourth in two-rowed barley; fifth in six-rowed barley and in rye; seventh in Sweet Clover seed; and second in his region for oats.

There is no question but that the influence of these men in their communities must be great. The mere fact that they are national figures in their chosen calling is much, but consider the material betterment to the neighboring farms this high class grain and hay offers in seed and in the knowledge of growing which is available through their efforts. Jewett and Howell are masters of their trade and they deserve all the success that comes to leaders of men.

MONTANA POLITICS

MONTANA grain dealers have been on the defensive ever since grain grading became an issue in state politics. The assistant commissioner of agriculture, John M. Davis, and Attorney General W. D. Rankin have recently held a hearing at Billings at which the grain dealers were called upon to show that they were not making too great profits. Unless Montana dealers have been more fortunate than the majority, all they needed to do was to show their income tax statement to disprove the charge of profiteering. But, of course, such simple proof would have little weight against the political advantage the hearing would bring to the Commissioner and the Attorney General. We are not acquainted with Mr. Rankin's future plans, and so cannot know whether he has his eye on the Governorship or the U. S. Senate. Whichever it is he is on the right track, for baiting the grain dealer landed in the Senate Capper of Kansas and Ladd of North Dakota; it was the principal ammunition of both, and if it is good in those two states it ought to have a fair chance in Montana.

Mr. Rankin charges that grain dealers pay only the No. 1 Dark Northern Spring wheat price for Montana wheat, whereas it should be graded fancy, choice, or fine. We find no such grades recognized in the markets where Montana shippers have to market their wheat. To be sure some mill may be willing to pay a premium for the grade, but Montana

is a long way from the milling centers and a consignment might find the market in different shape than on the day it was purchased of the farmer. Except under unusual conditions, paying over grade price would be an out and out gamble. Testimony was submitted showing that such a gamble proved successful in certain cases, but that does not prove that it is business wisdom, any more than a single cast of seven proves that shooting craps would be a profitable business. But, of course, this is beside the mark, as the investigation is not an inquiry into the grain business so much as a political move. On the latter basis it is a fine move and we predict that Mr. Rankin will go far.

NO INCONSISTENCY

ON ANOTHER page of this issue, C. R. Ball, cerealist in charge of the Bureau of Plant Industry, calls attention to apparent contradictions in two editorials which appeared last month. The one endorsed the work of the Budget Bureau, and the other endorsed the work of stem rust prevention through the eradication of the barberry. The contradiction lies in the fact that barberry eradication has been dependent upon increased appropriations for the Bureau of Plant Industry.

According to the estimate by the Bureau, stem rust in 1922 destroyed 41,833,000 bushels of wheat, 3,659,000 bushels of barley, 19,987,000 bushels of oats, and 89,000 bushels of rye, a total in value of well over \$50,000,000. A bureau which can effect a saving of this amount deserves the most liberal appropriation and we hope that it gets it. Its work is constructive and of immediately material advantage to the farmers. But can it be claimed that all Federal bureaus and commissions are constructive? Hardly. It is these non-productive, salary-absorbing, business-baiting agencies that need to be choked off in their appropriations and finally exterminated.

The Bureau of Plant Industry is to the Agricultural Department what the efficiency expert is to a manufacturing concern. No manufacturer begrudges the salary of an expert who cuts the cost of production or increases output, nor do the people of the United States question the comparatively small cost of saving \$50,000,000. There was no inconsistency in our editorials. The one only emphasized by contrast the general truth expressed in the other.

FREIGHT RATES TOO HIGH

EXPERT accountants only can determine whether or not the railroads can reduce the freight rate on grain and show a profit in handling that commodity. The hearing before the Interstate Commerce Commission in the petition for further reduction, brought by various western states, disclosed plenty of testimony showing that grain rates are all out of proportion to present grain values. We know that rail operating costs, thanks to the rules laid down by organized labor, are too high, and it may be that the railroads

will be able to prove their contention that grain cannot be carried for less without actual loss. But that does not close the argument by any means.

All of the western railroads were built into virgin territory where there was no possible chance of immediate return. The quick settlement of the country by pioneers brought business to the roads, however, and they soon began to show profit. The present situation is analogous. The wealth of the West is in its agricultural products. The more the farmer can realize from these products the more he will have to spend on other commodities which carry higher rates and are more profitable. The question, then, arises as to whether it is not good business to carry farm products at less profit for the sake of creating new business, to say nothing of establishing good will. This latter is beginning to be recognized as a material asset by the roads, for which many of them pay liberally in advertising.

So the question is not one for the mere accountant, but is a problem for the far-sighted executive, who might well take a leaf from the notebook of the empire builders, the Goulds, the Hills and the Harrimans.

WHO IS CONGRESSMAN TINCHER?

OUT in Medicine Lodge, Kan., the farmers elected a man by the name of J. N. Tinchler to represent them in Congress. Mr. Tinchler was not known outside of his district and would not have been known more widely today if he had not joined with his fellow statesman (?) in the Senate, Mr. Capper, in attacking one of the largest industries in the country. The two of them introduced a bill to control the trade in grain, or as they often alluded to it, to put the grain exchanges out of business. The bill was passed and was promptly declared unconstitutional by the U. S. Supreme Court, and was even more promptly declared by every authority on economics to be more harmful to the farmers than to anyone else.

These two self-appointed champions of the farmers, who supply most of their votes, introduced another bill as objectionable as the first, and now the Supreme Court has to pass on that. This shows the caliber of these Kansas statesmen who, to curry favor with their constituents, try to put over unconstitutional bills, aimed at an honorable trade.

In the meantime Mr. Tinchler was up for re-election. He was primed with ammunition pleasing to the farmer voters, and was re-elected almost without opposition. But he needed more notoriety so he has accused the grain exchanges with contributing to defeat him in his district. A dispatch from Washington to the New York *World* says: "Mr. Tinchler today declared 460 exchanges contributed \$50 each to a 'slush' fund, or a total of \$23,000 and went into his district to defeat him."

Mr. Tinchler is known to the grain exchanges merely as a name attached to a certain bill. They don't care what happens to him, although they probably feel sorry for his constituents if they ever gave the matter

a thought. We doubt if a single exchange knew or cared whether Mr. Tinchler was re-elected until he sought out this new publicity by his attack. He may, as he threatens, demand an investigation of the grain exchanges. If he does we hope to be around when the investigators try to find the 460 exchanges that he accuses.

EXTENDED FARM CREDITS

CONGRESS seems certain to pass the Farm Finance Law. The farm bloc has put the Indian sign on the legislature and they are afraid to protest any measure advocated by the bloc. The bill was prepared by Eugene Meyer, Jr., and provides for the rediscount of agricultural paper with maturities ranging up to nine months. Formation of agricultural credit associations, with the right to make loans up to three years, is also authorized. The time limit for the rediscount of ordinary commercial paper through the Federal Reserve Bank is 30 to 90 days, so the bill is discriminatory in that respect.

But do the farmers need this discrimination? A recent survey made by one of Mr. Capper's papers shows that 70 per cent of the bankers in the West report that they are having no difficulty in taking care of the farmers' needs and a large majority report that farm conditions are improved over 1920. The report of the Joint Commission of Agricultural Inquiry, of which Sydney Anderson of Minnesota was chairman, shows that: 1, The expansion of bank loans in rural districts during the period of inflation ending June, 1920, was relatively greater than in the industrial sections, taken as a whole; 2, The action of the Federal Reserve Board and the Federal Reserve Banks during the 15 months preceding April 28, 1921, did not produce a greater curtailment of bank loans in the rural district than in the financial and industrial sections; 3, Credit was not absorbed by the financial centers at the expense of the rural communities for the purpose of speculative activities; 4, The pressure of the forces of liquidation and depression in the agricultural sections was reflected in a reduction of deposits. This reduction, particularly in demand deposits, was relatively larger in the agricultural and semi-agricultural counties in the United States than in the industrial counties.

The Joint Commission also expresses the opinion that steps should have been taken to check inflation earlier than was done. From the above facts George E. Roberts, vice-president of the National City bank of New York, concludes that the agricultural distress of the last two years was "too much borrowing." The farmer, along with the business man, has had too much credit. The farmer, like everyone else, likes easy money and the idea of increasing his borrowings on favorable terms appeals to him. The farm bloc politicians knew that it would, and the whole scheme of extension of farm credits is a political measure, and did not arise from agricultural need of the present time, or in answer to an actual demand from the farm. The demand came afterward. We do not

believe the present conditions justify discriminatory legislation, nor that a further incentive toward inflation is wise.

THE COST OF WHEAT

NORTH DAKOTA agricultural economists have just announced that it cost an average of \$1.43 cents per bushel to produce wheat in that state in 1921. The investigation was made on 127 farms having an average yield of 9.05 bushels per acre.

In the survey last year 19 farms were found with an average yield of 14.7 bushels, practically the same as this year's average yield for the entire state. The cost on those farms last year was \$1 or less per bushel. The production costs were certainly lower this year than last so that the state ought to be in a prosperous condition. It is an auspicious time to open the state mill and elevator, for the farmers will show a profit on their wheat and the politicians can easily show them their prosperity is a result of state utilities.

BUSINESS PROSPECTS

FORESIGHT is the most valuable and the most rare attribute of a business man, and yet the matter of foresight is becoming more and more a mere application of scientific principles based upon cycles. Roger Babson, the statistician, has been one of the first to demonstrate to the man on the street how he can apply the law of cycles to his own affairs. In a recent address in Chicago Mr. Babson outlined the prospects for 1923.

To begin with, we are in that stage of the cycle that marks the beginning of general improvement. Specifically he mentions four reasons why business in general should improve and three factors which are retarding influences. You can shake these up and then decide for yourself what the mixture looks like.

The four favorable influences Mr. Babson lists as follows: Increase in value of agricultural products by \$1,000,000,000 with decrease in production cost; stronger monetary situation, merchants and manufacturers having reduced their loans \$1,000,000,000 in the last year; sound mercantile situation based on small stocks and greater price stability; we have arrived at the point where the majority of people have substituted honesty for dishonesty, industry for indolence, efficiency for inefficiency, and righteousness for unrighteousness. These are the conditions which to Mr. Babson's mind make for optimism of the future. But still conditions are not perfect as he goes on to show.

The three difficulties which must be overcome are the overcapacity of the factories and mills of the country; incomplete readjustment of labor, not in wages but in production; and the foreign situation. The balance Mr. Babson finds on the side of increasing prosperity, and he looks for distinct betterment in 1923. The crux of this balance will lie in distribution. This is certainly true so far as the grain trade is concerned. The railroads, considering their physical condition,

have moved great quantities of grain this fall, but the lack of adequate transportation has been a hardship on a great number of country shippers and if this condition is improved they can look forward to far more confidence to 1923.

FARM BLOC SPLIT

REPORTS from Washington indicate that the Administration policy of giving financial aid to the farmers, has split the farm bloc. The conservatives will back the Lenroot Bill, while the radicals, led by La Follette, Ladd and Morris will back the Simmons Bill, and will fight the Administration measure, the Lenroot Bill, on the floor if it is presented.

The Lenroot Bill is far from a perfect instrument, and, in fact, is unnecessary. But it will serve a useful purpose if it breaks up the farm bloc. Such a break was inevitable sooner or later, for the farm bloc members, under pretense of working for the farmers, are all working for their selfish interests, and these were bound to conflict in time. The time seems to have come. There is comfort in the thought that blocs, formed on a foundation of selfishness are self destructive.

GOVERNMENT AID TO CO-OPERATION

REVIEWING the activities of our Department of Agriculture in promoting co-operative activities it seems hardly creditable that the most conservative speaker on co-operation at the annual meeting of the Ontario (Canada) Agricultural and Experimental Union was Dr. H. E. Erdman from our own Bureau of Markets. But such is the fact. After suggesting many of the services performed by the middleman, Dr. Erdman summed up the situation by saying:

That means, therefore, that unless a co-operative organization can perform the services it proposes to render more efficiently than the private agency which is now performing them, or just as efficiently at least, it is not going to persist. I have been taken to task for making the statement that co-operation cannot exist, if not more efficient than private initiative. Men have said to me that if it is just as efficient that is all we need. I say it is not, for the reason that there is the difference between co-operative and private business that there is between the hare and the hound—the hare is running for his life, the hound for his dinner. A co-operative association is a great deal like the hound; your private organization is very much the hare. Put a man in a business institution downtown with an investment of many thousand dollars, usually most of his own money, and unless he uses every ounce of the gray matter in his head, and perhaps hires some one else's as well, he is likely to have somebody get the best of him, and if they do, it means the loss of an accumulation of a life-time. He does not want to do that, and if he can help it won't do it. The man who is operating a concern for a group of farmers or others is doing it for his salary. There is no way I know of to keep him as much interested as a man operating his own business.

A reply to Dr. Erdman was made by Hon. Manning W. Doherty, provincial Minister of Agriculture, Toronto. He tried to prove that co-operation was bound to be more efficient, for instances in the matter of grading where

the farmers' interest was in establishing a reputation for his product. He said:

Grading can be done by governments or by private individuals, but grading can never be successfully and properly done except by producers themselves. The producers will resent government interference, but if their own organizations establish their standards they can impose the will of the association upon the members and get results in six months which the government would not be able to get in three years. All history demonstrates it to be a fact that efficiency in grading can only be done by co-operative organizations, organizations made up and controlled and operated by the producers.

This is a sample. Can you imagine the need of more than one grade for grain if the producers graded it, and that grade No. 1? Perhaps Canadian farmers are different from those in this country, but we know that every attempt of the farmers to change the grain grade has been in the direction of debasement; to get more grain in the higher grades regardless of its intrinsic value. We fear that Mr. Doherty's argument will not be convincing to the majority of grain dealers and that they will continue to favor grading by disinterested bureaus, supervised by government agencies.

EDITORIAL MENTION

We wish you a merry Christmas, with more confidence that it can be granted to all than has been possible for some years.

Baltimore has exported 32,000,000 bushels more grain this year than last. Not a bad record for a port that lost two big elevators by fire during the year.

Germany has prohibited the brewing of strong beer to conserve barley for feed. But the beer that is still permitted would probably satisfy an American camel.

A broad survey in Iowa by the Manufacturers Association shows \$150,500,000 is invested in automobiles in the state and the annual upkeep is \$76,000,000. How long can this keep up?

That south Russia can export wheat while north Russia has to import large quantities is not strange. Under the present condition of Russian railways Odessa is farther from Petrograd than is New York.

France is to have a National Wheat Week, January 23-28, to stimulate intensive wheat farming so as to become independent of imported wheat. This would seem to be energy better directed than occupying the Ruhr Basin.

There has been great damage this year by grain weevil, and many measures have been tried to kill them. It hardly seems possible that any grain man would have so little sense as to use coal oil or any compound of which coal oil is a part on wheat for this purpose. But the Marshall Hall Grain Company of St. Louis reports that wheat has been re-

ceived with a strong coal oil odor and has had to take heavy discounts as mills will not consider it and the process of removing the odor is expensive. Do not use a patent fumigant unless you are sure that it contains no coal oil.

The radical West is determined to have the guarantee clause stricken from the Esch-Cummins Act. This will not affect the moral obligation of the Interstate Commerce Commission to establish rates by which the railroads can live.

In Hungary there is an export tax in kind. That is, if a miller exports 220 pounds of flour he must pay a tax of 143 pounds of good wheat to the Government. Wheat is second only to gold as an international collateral.

An injunction has been granted against the new North Dakota Grain Grading Law. It is open to much the same objections that made the Supreme Court declare the old law unconstitutional. Since North Dakota is rolling in funds, the law will doubtless be threshed through the courts again.

Casting the grain trade's horoscope for the new year, we see Sagitarius the archer in the ascendant, indicating that the trade will have plenty of fights on its hands, with Leo the lion, rising in prominence later, so the trade should win. Perhaps this isn't good astrology but we believe that it is a good guess.

The Subsidy Bill is having hard sledding in the Senate. It is just as well, for there is a lot to be said on both sides of the question and there is no reason to railroad it through without finding out where it will lead. In the meantime Congress might repeal the Seaman's Act and make a ship subsidy unnecessary.

The Federal grades on "damage" are open to too much variation of judgment on the part of inspectors. It has never been satisfactorily determined just how deep discoloration shall go before the grain is pronounced 'bin burned. This uncertainty has hit the Southwest pretty hard and they should have relief.

The probability of the early passage of a farm credit measure, and the talk of arranging for foreign credit to aid exports of grain has given the market a strong tone. The end of lake shipments was expected to bring a quieter tone, but farmers are holding with confidence and there is little likelihood of burdensome receipts.

Montreal expects to clear 160,000,000 bushels of grain this season. About the same amount was shipped out of Port Arthur and Fort William, but during October and September alone some 33,000,000 bushels went to American ports for export. A large quantity of western Canadian grain was consumed by eastern Canadian mills and some by American mills, so that the total of American grain shipments through Montreal must

have far exceeded shipments of Canadian grain through our ports. Montreal, by the way, expects to have a new elevator finished next fall, and a new line of steamships operating between Buffalo, Port Colborne and Montreal. The Canadian Port doesn't want this business to get away from her and knows how to retain it.

Europe is sadly in need of greater grain production, but in several countries the governments seem to be doing their best to discourage the farmers. Confiscating grain at less than market value does not make for larger crops. Unless there is a change in this respect Europe will need more of our grain next year than it has needed this.

The Reparations Conference, started at London and adjourned to Paris, is apparently getting nowhere. This is also true of the Baltic Arms Limitation Conference. Europe has a lot of fat in the fire, but it does not appear just how American participation in its affairs at this time can help matters. The trouble is too much politics and not enough common sense.

The New South Wales Government has introduced a bill in its legislature to prevent the formation of monopolies, trusts and combines which tend to maintain artificial prices. This is aimed at the voluntary wheat pool which last year shipped great quantities of grain abroad on consignment with the deliberate purpose of creating a domestic shortage in order to advance prices.

Great Britain imported 662,000 more tons of wheat during the first nine months of this year than during the same period of 1921, and yet stocks are lower than the average. British millers are complaining of lack of business, but the above statement doesn't seem to bear them out. Probably the trouble with British mills is the same as with our own; over development of capacity during the war.

The International Institute of Agriculture estimates the total wheat surplus of exporting countries at 972,660,000 bushels; requirements of importing countries, 946,270,000 bushels; leaving a carryover of 26,390,000 bushels as against a pre-war carryover of 225,000,000 bushels. This looks as though even Southern Hemisphere grain would sustain its price, and eliminate the usual bugbear at the turn of the year.

The Kansas Public Utilities Commission insists that railroads furnish cars for farmers to ship their grain on the same basis as elevators are served, depending on priority of orders. An elevator serves many farmers, and yet one shipper might monopolize the cars at his station and make the many wait. This is a time where true justice concerns itself, not with individuals, but with the greatest good to the greatest number.

The wheat pool is very nice for the man who has poor milling wheat that may grade No. 1. But how about the man with high

grade milling wheat who usually gets a premium for it? Does he get the benefit for his high quality? He does not. His premium merely averages up the poor stuff that is discounted. Poor milling wheat like Poland yields heavily, and the wheat pool would put a premium on that kind of wheat. This is just one of a great many dangers of pooling.

J. J. Cornwell, general council for the Baltimore & Ohio Railroad, told a meeting of railway executives on December 12, that they should reduce freight rates on farm products before they were forced to do so, and to tell the story of the railroads in every paper on their lines in paid advertising space, to counterbalance the propaganda put out by politicians and other demagogues. This is the best advice the railroads have had in a long time.

Elevator screenings, which last year were such a burden at the Head of the Lakes, are now being used to feed sheep and cattle. Sheep thrive on screenings and 8,000 were fattened on them last winter. Experiments are being conducted with cattle and if successful, feeding pens will be established at Port Arthur to handle 10,000 steers. Perhaps the screenings difficulty will be the means of establishing a new and profitable industry at Port Arthur.

The American Farm Bureau Federation, meeting in Chicago this week, is directing much of its attention to the organization of a national co-operative marketing division of the Federation. A committee was appointed to go to Washington to confer with the National Association of Cooperative organizations which is meeting there. It remains to be seen whether or not the co-operatives have learned anything from the Grain Growers fiasco.

A recent survey of opinion among North Dakota farmers disclosed that most of them advocated a wheat price guarantee by the Government; some wanted a Government operated wheat pool; and only one man acknowledged that guaranteeing wheat prices would open the way for a guarantee on every commodity of which there is an over production. North Dakota has some good farmers, some astute politicians, but it is somewhat shy on economists.

This is the sort of propaganda going the rounds of the country press. They state that the Capper-Tincher Law will be upheld because "the courts upheld a similar law against the Louisiana lottery." Farmer readers are being fed that sort of thing by the ream. Is it any wonder they are distrustful of the grain exchanges? Farmers are not to blame for this wave of inimical legislation, it is the politicians and the ignorant country editors who set up bogey men of straw so they can claim credit for knocking them down. It would be funny if it were not so pitiful, for the farmers would be the first and the greatest sufferers.

E. L. SOUTHWORTH
Toledo

NEWS OF THE TERMINAL MARKETS

W. N. ECKHARDT
Chicago

ADVISES AGAINST HOLDING GRAIN

An interesting as well as instructive pamphlet has been issued by the Publicity Committee of the Minneapolis Chamber of Commerce and sent out to Northwestern grain producers. It touches upon the future markets and the service they render and discusses particularly the question as to whether it pays the farmer to hold his grain or sell on the first early movement. It shows that from 1885 to 1914 the farmer who marketed his grain early in the year came out as well or better than the one who held.

RECEIPTS TOO SMALL FOR DEMAND

The demand for all of this grain at present is broad and receipts are much too small. We believe that the car shortage is restricting the movement materially and although there are some reports of improvement in this regard, it is not being felt to any great extent, particularly in territory tributary to the Milwaukee market. Our buyers want this grain and we are anticipating an active market right along for all grains.—*E. P. Bacon Company, Milwaukee, Wis. Market letter of December 13.*

DEMAND EXCEEDS SUPPLY

The car shortage has been the determining feature in this market on both grain and hay. Under present conditions the demand for both commodities has exceeded the supply and we have witnessed higher prices almost every week for the past month.

The car situation for the last few days has shown some signs of improvement, but cold weather arrived yesterday and will probably slow up the freight movement as usual. We always have a falling off in the demand for grain and hay about this season of the year, as buyers try to cut down their inventory as much as possible, and would not be at all surprised to see a slacking in the demand immediately.—*The Mutual Commission Company, Cincinnati, Ohio. Market letter of December 13.*

GRAIN AT MONTREAL

A correspondent in Montreal writes:—A vast stream of grain from the fields of Western Canada is pouring through the port of Montreal to the Old World. More than 116,000,000 bushels of grain have been handled from the opening of the navigation season up to the middle of October.

Shipping men say that last year's record total of 138,453,980 bushels will be far surpassed by the close of navigation. Elevator facilities are being taxed to the limit.

Practically all varieties of grain needed for immediate shipment to foreign points are on hand with the exception of No. 1 Northern Manitoba wheat, supplies of which are being passed on to the waiting steamers almost as soon as they reach the port. This shortage is not sufficient to cause delay to the steamers, but only to prevent the accumulation of spare stocks at the elevators. Between September 1 and September 15, shippers sent forward to Montreal a total of 999 cars loaded with American rye.

The number of steamers docking and the aggregate tonnage so far this year greatly exceeds the totals registered during the same period last year. A total of 772 ocean steamers reached Montreal from the opening of the navigation season to October 8 as compared with 638 in a similar period a year ago. The respective total tonnages were 2,618,500 for 1922 as against 2,080,567 for 1921, an

increase of 537,939 tons. Up to the same date 175 coasting vessels arrived, as compared with 138 in 1921.

Of the vessels which arrived here this year, 502 were British; 75 Norway; 39 Italy, 28 United States; 21 Denmark; 21 Holland; 8 France; 7 Greece; 6 Sweden; and 2 Spain. Germany, Yugoslavia and Finland each supplied one ship to Montreal this year.

THE ELECTION AT OMAHA

The new officers to serve on the Omaha Grain Exchange, Omaha, Neb., next year are: President, S. S. Carlisle, of Carlisle-Burns Grain Company; vice-presidents Frank J. Taylor, of the Taylor Grain Company and C. D. Sturtevant of the Trans-Mis-



S. S. CARLISLE, OMAHA, NEB.

issippi Grain Company; treasurer, C. C. Crowell Jr., of the Crowell Elevator Company. Directors chosen are: C. C. Crowell, Jr., S. S. Carlisle and C. D. Sturtevant.

Mr. Carlisle removed to Omaha from St. Louis where his father, David Carlisle, was a member of the St. Louis Merchants' Exchange for 45 years. Mr. Carlisle has been a member of the Omaha Grain Exchange for 12 years.

SPOT GRAIN AT BUFFALO

The spot market for corn at Buffalo has been very active the past few weeks and at gradually advancing prices so that the new corn is now selling within 1 cent per bushel of the top price at which the old corn sold in this market on the last crop.

The absence of any elevator stocks of corn such as we have had almost continuously for the past two years is resulting in a broader market for rail grain which shows every prospect of continuing throughout the winter as feeding operations in the East are on a larger scale than for the past two years and colder weather will still further stimulate the demand.

Oats have dragged in this market as they have recently in all eastern markets and these prices have barely followed the advances in the futures.

A change in the cash situation is not expected much before the turn of the year but with stocks in dealers' hands getting very low, a revival in the demand for oats is looked for soon after inventory time. As in corn, elevator stocks of oats are much lighter than last year so that any improvement in the demand would be quickly reflected in spot prices.

Lake navigation is about closed and while the elevators are filled and a great number of vessels are carrying grain in the harbor of winter storage, practically all of this grain is destined for export and will not appear on the local markets.—*J. G. McKillen, Inc., Buffalo, N. Y. Market letter of December 12.*

GOOD MARKET AT CINCINNATI

The Cincinnati market for the past few weeks has been extremely strong on all grain, and on the better qualities of hay, suitable for jobbing trade, and prices have advanced materially.

The arrivals are restricted owing to the car situation but the past few days this seems to have loosened up, and present prices being entirely satisfactory to the shippers should increase receipts in the next few days. At present the arrivals are not enough to supply the requirements of the trade.

Ear corn has been especially wanted for stock feeding purposes, and has shown a big advance being about 10 cents higher than 10 days ago.—*The McQuillan Company, Inc., Cincinnati, Ohio. Market letter of December 12.*

LARGE RECEIPTS OF CORN

Receipts of corn have been fairly large here recently and values have been holding up well in line with those in other markets. A good portion of the arrivals are now being placed on contracts made some time ago. This is no doubt the cause of the country not selling freely, they preferring to get December contracts filled before doing fresh business. Cars still continue very scarce. While the domestic demand East and export demand is not keen at the moment there seems to be enough to take care of the corn coming in from day to day.

Receipts of oats have also been fair and they have been bringing good prices here as compared with other markets. Both shippers and outside oatmeal mills seem to be the best buyers. Country acceptances on bids are very light, and, as in corn, the demand is not so urgent at the moment.—*Mueller Grain Company, Peoria, Ill. Market letter of December 12.*

SUPPLIES WILL MEET WORLD'S REQUIREMENTS

The comparatively close adjustment of world's supplies and requirements, presents conditions that have merit and are entitled to full consideration, these factors apply more forcibly to wheat and rye. It is a notable fact, however, that the production of potatoes in this country, and the enormous saving in feedstuffs on the farms, as a result of the very mild fall season, are bound sooner or later to be reflected in the price of all grains. Thus far these factors, as important now as in past seasons, are rarely mentioned.

It looks to us as though current prices for corn and oats discount in a large measure the bullish views so persistently put before the trade. From mid-summer up to the present time, the opportunities to market these grains have been seriously hampered. Turning especially to oats, it must be borne in mind that the production in Canada this

year is practically a record crop; although the movement from stations in the Western Provinces has so far been moderate, the competition of their surplus has already made it very difficult to do business abroad, so that the accumulations from the previous crops that still make up the liberal visible supply in the United States could be further reduced.—*Pope & Eckhardt Company, Chicago, Ill. From market letter of December 11.*

EXCELLENT DEMAND FOR SPOT CORN

Soft Red winter wheat continues to sell in our market at very fancy premiums over other western markets with very light receipts and hardly enough to supply the demand. No. 2 Red wheat is selling here today at equal to 8½ cents over Chicago May, basis at 41½ cents New York rate point.

We are having an excellent demand for spot corn due principally to the present car shortage which appears to become more acute each day. There is no export demand at the present time and the domestic demand from the East is rather limited, buyers confining their purchases to a car at a time. It will take a considerable increase in receipts to cause any material decline in our cash prices.

Cash oats continues to sell at a premium over the option, due principally to the car situation. There is a very limited demand from the East and we doubt very much if this market would stand any increased movement of grain.—*McCardle-Black Company, Indianapolis, Ind. Market letter of December 12.*

WHEAT INTRINSICALLY CHEAP

Wheat has a great many friends and justly so. It has been demonstrated repeatedly of late on breaks. Be this buying against export sales or of an investment character is of less importance than the fact that its presence is a formidable factor. It is an important link in the gradual process of price adjustment as determined by the relative position of supply and demand. That wheat is intrinsically cheap must be conceded, if based on nothing else but the non-existence of Russia as a surplus producer and the enormous deficiency in home-grown crops abroad, as compared with last year.

This warrants a constant demand for wheat and were finances not a curtailing factor prices would likely exceed these of other commodities relatively. What a German correspondent writes is illustrative: "The people in America have no conception of the gravity of our food situation and present conditions before the war with Russia a normal shipper would mean \$1.50 for wheat."—*J. Rosenbaum Grain Company, Chicago, Ill. From late market letter.*

CHICAGO BOARD OF TRADE RULES

On December 11 the members of the Chicago Board of Trade, Chicago, Ill., by a vote of 372 to 45 approved an amendment to section 3 of rule 22 making it read as follows:

"On contracts for grain or flaxseed for future delivery the tender of a higher grade of the same kind of grain or flaxseed than the one contracted for shall be deemed sufficient. For delivery on and after August 1, 1923, all contracts for wheat, unless otherwise specified, shall be understood as 'contract' wheat, and on such contracts a tender of the following described grades of wheat in such proportions as may be convenient to the seller, but in no case an amount less than 1,000 bushels of any one grade in one elevator, shall be deemed a valid tender at the price differences mentioned in the following schedule; subject, however, to provisions of section 5 of rule 21:

"No. 1 Dark Hard winter and 1 Dark Northern spring, 1½ cents over contract price; 2 Dark Hard winter and 2 Dark Northern spring, ½ cent per bushel over contract price; 1 Hard winter, 2 Hard winter, 1 Yellow Hard winter, 2 Yellow Hard winter, 1 Red winter, 2 Red winter, 1 Northern spring and 2 Northern spring, contract price; 3 Dark Hard winter, 3 Hard winter, 3 Yellow Hard winter, 3 Red winter, 5 cents per bushel under contract price; 3 Dark Northern spring and 3 Northern spring, 8 cents under contract price. On contracts for wheat, rye or oats, for future delivery, in store, in no case

an amount less than 1,000 bushels of any one grade in one elevator shall be deemed a valid tender."

An amendment providing for a nominating committee for officers was also favored by a vote of 364 for and 59 against.

CHARLES RIPPIN, TRAFFIC LEAGUE HEAD

The newly elected president of the National Industrial League is Charles Rippin, traffic commissioner of the St. Louis Merchants' Exchange of St. Louis, Mo. This important organization now numbers over 1,000 of the larger shippers and shipping organizations of the country. Its headquarters are in Chicago.

Mr. Rippin is well known to the grain trade by reason of his activities in relation to the Merchants Exchange and has been on the programs of some of the leading state organizations of grain dealers. He was formerly engaged in railroad work at St. Louis for over 20 years and has handled the transportation problems for the St. Louis Exchange



CHARLES RIPPIN, ST. LOUIS, MO.

for the past 10 years. In his official capacity he has appeared often before the Interstate Commerce Commission and other traffic bodies.

CHANGES IN MEMBERSHIP

Chicago.—The memberships of the following have been transferred: William T. O'Donnell, H. Bates, Jr., George C. Bulloch, A. M. Kayser, Jose. E. Hood, Estate of Frank Kimball and Harry E. Sprague. John B. De Lany, George A. Chapman, Patrick J. Brosnan, George McGrath, Eugene J. Burke, Joseph H. Moore and Benjamin G. Humphreys have been admitted to membership. Samuel Nast was expelled from membership on November 14. Reported by Secretary John R. Mauff.

Milwaukee.—New members recently elected to the Chamber of Commerce are: Frank A. Prei and Earl L. Patterson. The memberships of E. G. Hadden and Gene H. Redford have been transferred. Reported by Secretary H. A. Plumb.

Wichita.—Harry L. Graham, Jr., was admitted to membership on the Board of Trade on transfer from J. W. Gerhardt. Reported by Secretary R. B. Waltermire.

SPLENDID DEMAND FOR CORN AND OATS

Our wheat market has been into rather a tight position and the mills are beginning to hold off on account of the holiday period, which is generally dull in the milling business. December wheat congestion has forced the price of this Soft wheat to almost prohibitive figures. We rather look for this wheat to be more or less dull until after the first of the year. Hard wheat is in better demand and is following the option closely, but it is practically on a delivery basis at all times. It looks to us as

though this Soft wheat is going to bring some very fancy premiums in the next two or three months, but at the present time it is probably a good thing to leave alone.

Corn is not coming nearly as fast as the trade had reason to believe it would. Whether the outside trade are getting it from terminal markets, or whether it is a question of cars, it is pretty hard to determine, anyhow we are not getting as much corn here as we expected and there are continued complaints from the shippers that they are unable to get cars and they are asking for extensions on their time of shipment. There is a splendid demand for corn for domestic use, but the outside movement is rather slow. It is not in line with the prices that are being paid for domestic uses. We look for the price of this corn to remain high all winter.

Splendid demand for oats and they are being absorbed as fast as put on the market. No accumulation of stocks at any place at the present time. We look for oats to continue to command a good premium.—*Elmore-Schultz Grain Company, St. Louis, Mo. Market letter of December 13.*

BREAD SUPPLY THREATENED

Bartlett Frazier Co., of Chicago, Ill., has just published a very comprehensive treatise on the subject of the world wheat situation and drawing the conclusion of a possible bread shortage. They show that the present world crop is short and that with uncertainties in Southern Hemisphere and depleted stocks to draw from together with an unfavorable United States prospect, our bread supply is threatened. The conclusion is as follows:

With world wheat stocks showing a consistent and steady decline during the past four years in spite of generally good crops in the four great producing countries, a serious Australian crop deficiency this year and a disquieting early prospect for the next United States crop, the question of world bread assumes an importance that is both political and economic. The hope that Russia may resume her place among the countries of the world and renew her contributions to the world's food has small basis in substance as an immediate relief. The length of time required for her economic recovery will be in direct relation to the depth of the economic abyss into which her unhappy people have been plunged.

The records show that during a period of generally satisfactory crop yields in the great producing countries, the world has still been forced to draw upon previously accumulated supplies and that now with these safety stocks already now reduced to a dangerous level, one of the great producers suffers a crop deficiency and another, the greatest producer of all, faces the probability of reduced production. The situation appears to force the conclusion that consumption pressure upon bread supply must result in dearer bread with the economic consequences that will follow such a consumption.

IMPROVEMENTS AT PORTLAND, MAINE

Having heard with much gratification of the vigorous and timely efforts being made to improve facilities at Portland, Me., we have obtained the following regarding those betterments through the courtesy of the Portland Chamber of Commerce:

Heretofore practically all the export and import traffic that has moved through the port of Portland, has been of Canadian origin or destination and therefore has moved almost wholly in connection with the Grand Trunk Railway, now part of the Canadian National Railway System. Therefore this movement has been largely confined to the winter season, to that part of the year when the Port of Montreal was closed by ice conditions in the St. Lawrence River.

Portland has experienced the same conditions as were found to exist in several other ports where the water fronts were almost wholly under railway control. This naturally has restricted development. It was therefore obvious that in order to bring about expansion it was necessary to have public ownership of at least a part of the water front, and hence the State of Maine is financing the cost of construction of a state pier which is now almost completed and will be available for use in the spring of 1923. This pier will be equipped with the best known freight handling devices including trucks and trailers and in addition to this a grain gallery connection will be made with the Grand Trunk Elevators.

It is of course wholly obvious that these much

needed improvements will materially help the growth of the shipping business in that port. In addition to providing berths for ocean going vessels, the pier is utilized by the New York and Portland as well as the Boston and Portland vessels. Besides the Canadian lines the pier will be accessible to the Boston & Maine, and Maine Central Railways.

THE MARKET AT PITTSBURGH

Receipts of corn are just about sufficient for a limited demand. Our spot market is somewhat lower than western terminal market offerings, but the eastern demand is very indifferent. Offerings from country points are quite liberal on all grades of new corn and arrivals here are of very good quality. Natural corn is arriving in good condition as a rule and meeting a fair demand. Driers are working here conditioning new corn and this is taking some corn off the market.

Our oats market is very dull with prices considerably under western terminal market offerings. Country offerings of oats are fair and as a rule are held above spot prices in eastern territory. Reports would indicate that oats at country points are held back. Corn, however, is being shipped in preference to oats.

The transportation companies are now moving cars much more freely than they were and delays in transit are now rare.

Most of the eastern distributors and interior dealers are over bought. During the recent delays in transportation and slow shipping of contract grain, many dealers duplicated their requirements and reports are numerous of dealers having sufficient grain to run them until after the first of the year. Oats especially are backing up, due to the fact that buyers now having contracts are asking dealers to withhold shipment until further advised owing to lack of storage space and duplicated shipments having arrived sooner than expected.—*Harper Grain Company, Pittsburgh, Pa. Market Letter of December 12.*

HELPING THE FARMER

With the advance which has already taken place in the grain market and with the probability of a still further advance (if the farm credit bills now before Congress should be passed), this Christmas should be a merry one for the farmer.

He is getting 100 per cent more for his corn than he did a year ago and 40 per cent more for his wheat and oats. His up-keep on the farm has decreased from 10 to 20 per cent. This includes labor, machinery and that necessary utensil—the Ford.

The grain men have been responsible, in a large measure, for this advance in prices. Most of them have been arrayed on the bull side of the market. The southern farmer has received a big price for his cotton and has been willing to pay good prices for northern wheat, corn and oats. This southern and also western demand has been a factor in the recent advance in grain prices.

Cheap grain is a thing of the past for sometime to come. We are probably drifting into a cycle of years when all grain and forage crops will drop back to normal production and possibly under normal.

While bullish advices are being received from Australia and Argentina, we might have a reaction in wheat prices in January when Argentine wheat will be pressing on the market.

New wheat prospects are the poorest in years but a crop scare at this time seems rather premature. A good covering of snow over the western wheat belt would dampen the ardor of the July bulls.—*Marshall Hall Grain Company, St. Louis, Mo. Market letter of December 13.*

THE 1922 grain crop in Soviet Russia, including Ukraine, is approximately 51,000,000 short tons or 22 per cent more than last year. This is, however, 30 per cent less than the prewar production. It is estimated that the exportable surplus will be about 2,750,000 tons. It is reported that the farmers are not making full returns of their crop, and therefore it is probably that the figures here given are underestimated.

TERMINAL NOTES

Corden Green & Co., have succeeded Pell & White of New York.

Frank L. Carey is now registered as president of the Nye & Jenks Grain Company of Chicago.

The Richmond Grain Exchange, Richmond, Va., has adopted the United States grades for rye and grain sorghums.

Samuel Nast of the firm of Nast & Co., La Salle street, Chicago, was expelled from the Chicago Board of Trade on November 14.

Earl L. Patterson of the Bush Grain Company, Milwaukee, Wis., has been elected to membership in the Milwaukee Chamber of Commerce.

Dilts & Morgan, grain commission firm of Kansas City, Mo., have established a branch office at Fort Worth, Texas, with C. G. Wilkinson in charge.

Henry Greve, president of John Wahl Commission Company of St. Louis, Mo., sailed from New York on November 16 on a trip around the world.

Thomas B. Phillips, son of the late George H. Phillips of Chicago and Harold C. Copenhaver, also of Chicago, have been elected to membership in the Chicago Board of Trade.

The Winters Grain Company has been organized at Oklahoma City by Frank Winters formerly of the Scannel-Winters Grain Company. Offices are in the Grain Exchange Building.

L. D. Toll has taken charge of the feed department of the Quaker City Grain Company of Philadelphia, Pa. He was formerly with the grain and feed firm of S. F. Scattergood & Co.

The James Stewart Grain Company of Canada has opened an office on the New York Produce Exchange with George Bingham in charge. Mr. Bingham was recently president of Webb & Kenward, Inc.

A corporation operating as Paul T. Jackson has been incorporated at Oklahoma City, Okla., to deal in grain and mill products. Capital stock is \$10,000 and incorporators are Paul T., and L. E. Jackson and Bernard M. Coleman.

Marshall Hall of Marshall Hall Grain Company, and Geo. F. Powell of Powell & O'Rourke of St. Louis, Mo., represented the St. Louis Merchants Exchange at the National Rivers and Harbors Congress at Washington, D. C., December 6 and 7.

C. A. Johnson & Co., have announced the opening of their grain and stock offices at 309 South La Salle street, Chicago, opposite the Board of Trade. Joseph Wild, former editor of the *Wagner Letter*, edits the *Johnson Letter* devoted to grains, etc.

Herman F. Franke, of the grain firm of Franke Grain Company, Milwaukee, Wis., was married recently to Mrs. Ida Allen of Milwaukee. They spent their honeymoon at Franke Lodge on Tomahawk Lake, Wis., and are now at their home on Twelfth street at Milwaukee.

Harris, Winthrop & Co., of Chicago and New York, announce the removal of their New York offices to the twelfth floor of the New York Stock Exchange Building, No. 11 Wall street, New York. The Chicago offices remain on the seventh floor of the Rookery Building.

In accordance with the action of the Board of Directors of the St. Louis Merchants' Exchange, St. Louis, Mo., a short time ago, 16 certificates of membership were recently presented to the Board for purchase and cancellation at \$350 each. Dues for 1922 will be paid on these memberships.

A number of Chicago Republicans are advocating Jos. P. Griffin for mayor of Chicago. Mr. Griffin is resident partner of J. S. Bache of Chicago and New York with Chicago offices in the Temple Building on La Salle street. He is an ex-president of the Chicago Board of Trade and one of Chicago's foremost grain men.

The item in our November 15 issue to the effect that the Carpenter Company of Battle Creek, Mich., had changed its name to the Carpenter Grain & Milling Company was incorrect. The Carpenter Grain Company owns a transfer elevator at Edwardsburg, Mich., and is in the wholesale grain

business in Battle Creek. The Carpenter Grain & Milling Company is a local organization in Battle Creek, which will have a warehouse for retail business in Battle Creek. These two organizations will both be in existence, one being wholesale and the other retail.

Two well known Chicago grain firms, J. A. Rodgers & Co., and Mayfield & Co., have consolidated as Rodgers & Mayfield Company. They will continue uninterruptedly to conduct a general business in handling grain and hay and deal in stocks, bonds etc. Offices are at 59 Board of Trade Building and 116 East Monroe street.

D. F. Piazzek of Kansas City, Mo., who entered the grain trade on that market with W. T. Kemper in the Kemper Grain Company in 1893, remaining in the business until 1917 when he became an officer of the United States Grain Corporation has left grain for milling, having become manager of the Kansas City Milling Company.

A car of oats weighing 129,090 pounds, or 4,034.02 bushels, testing 31 pounds, was unloaded at McKenna & Dickey's elevator at Chicago, Ill., on November 21. It was the largest car of oats ever unloaded in Chicago and was handled by Lamson Bros. & Co., Chicago. It was shipped by A. J. Forning & Son of Webster City, Iowa.

E. J. Martin, Omaha representative of the J. Rosenbaum Grain Company of Chicago, Ill., has left that city with his family for Norfolk, Va., where he will fill the position of manager of the company's new large elevator there. Before leaving he was presented by the members of the Omaha Grain Exchange with a handsome traveling bag.

E. W. Fiedler of Superior, Wis., has been appointed a member of the Wisconsin Grain and Warehouse Commission to succeed James Kenan, deceased. Mr. Fiedler has been connected with the grain business in Superior for the past eight years and has been active as state warehouseman at the Itaska Elevator at Superior since 1917.

The Seymour-Wood Grain Company of Buffalo, N. Y. sent out a card the past month containing a half dozen verses the subject of which was "Old Timers." The company confesses to be old timers in respect to the senior member who has been delivering the goods at Buffalo to western grain dealers for these many years. The verses tell something about their service and why it pays to send shipments to Seymour-Wood Grain Company.

The Kansas City Board of Trade was visited one morning in December by a class of 20 students from the Kansas State Agricultural College, Manhattan, Kan. Their object was to learn something at first-hand of board of trade methods in marketing grain. The manufacture of grain products was also studied at a visit to Elevator A of the Armour Grain Company, and the plants of the Southwestern Milling Company, Inc., and the Corn Products Refining Company.

A long established precedent on the Chicago Board of Trade was broken this month when 650 boys and girls were welcomed on the exchange floor. They were members of the Junior Agricultural clubs, winners of prizes at the National Grain and Hay Show at the stock yards. The delegation represented 30 states of the Union. It was said that never in the history of the Board had girls or women been generally admitted to the exchange floor except for a brief period during the late war.

F. E. Watkins of the Cleveland Grain & Milling Company, Cleveland, Ohio, recently elected president of the Grain Dealers' National Association at the New Orleans meeting, was the guest of the Grain and Hay Exchange of The Cleveland Chamber of Commerce at a dinner tendered him on the evening of November 17, at the Cleveland Athletic Club. The meeting was attended by all the leading grain men of the Cleveland grain trade. Speeches of congratulations to Mr. Watkins were made by a number of those present and Mr. Watkins was presented with a valuable silver engraved gavel. Mr. Watkins responded thanking the Association for the gift and the expression of good feeling toward him and in a most pleasant talk gave a brief review of the work

and purpose of the Grain Dealers' National Association from the time of its first organization to the present. He also reviewed briefly the work it had already done and the benefits arising from such an organization to the grain trade in general. It was a meeting thoroughly enjoyed by all those present and demonstrated the esteem and friendship that the grain trade of Cleveland entertained toward Mr. Watkins. They do not think the Association made a mistake in electing him as president and predicted for him a most successful administration.

TRADE NOTES

The Northwestern Engineering & Equipment Company is now Pacific Coast agent at Portland, Ore., for Sprout, Waldron & Co., of Muncy, Pa.

A radio equipment is rapidly becoming about as necessary in a grain elevator as a sheller or other pieces of machinery. The Ehrler-Radio of 30 North Dearborn street, has radio sets and accessories for prompt shipment and calls attention besides the half-hourly market reports throughout the day, to the many things to be secured from the air by this wonder worker.

S. T. Edwards & Co. of 110 South Dearborn street, Chicago, Ill., who specialize in feed system engineering, have recently issued a new bulletin describing their new machinery for forcing semi-solid buttermilk, or any kind of milk products into manufactured feeds. This is an entirely new process and will be of great value to commercial mixed feed manufacturers. A copy can be secured free of charge by writing for it.

The B. F. Gump Co., of 406-446 South Clinton street, Chicago, Ill., now in its fiftieth year of service to the grain and milling trades, offers as a specialty during the winter months, their Korn-Kracker Grader and Polisher, a mill at little cost to produce a large profit. It is a self-contained mill that cracks, grades, polishes and aspirates in one operation. The Korn-Kracker Circular will be mailed free on request which tells all about it and the advantages to be derived from its installation.

The Universal Exposition of Inventions and Patents will be held in Grand Central Palace, New York City, February 17 to 22, 1923. The object of the exposition is to fulfill an important universal need and is intended to bring the capital of America and the inventive brain of the world together as well as give all inventions full opportunity to show the public and manufacturer, the merchant, capitalist and financier the possibilities for utility, business, trade and commerce that lies in their inventions.

The S. Howes Company of Silver Creek, N. Y., recently received from the Black Rock Milling Corporation of Buffalo, N. Y., the order for what is believed to be the largest feed plant in the state of New York. The order comprised a 20 ton per hour Eureka Continuous Mixer, a large automatic agitator, a 2,000 pound batch mixer, two preliminary heating tanks each of 600 gallons capacity and two Eureka-Keeney Instantaneous Molasses Super-Heaters. The company has been unusually busy in its feed milling machinery department during the past months.

A. B. Hess recently became director of publicity for A. B. Farquhar Company, Ltd., York, Pa., manufacturers of farm machinery and heavy line of threshing machines, engines, boilers, sawmills, hydraulic cider presses, etc. Mr. Hess is well equipped for the duties of his new connection. He was born and reared on a farm, owns and conducts a farm in the Cumberland Valley of Pennsylvania, and has a practical as well as technical knowledge of agricultural problems and needs as they are presented in the central and far west, as well as the eastern states. He has had long experience in the work of education and publicity, for a number of years being educational director

James E. Bennett & Co., well known grain and stock firm of Chicago, Ill., advise the trade that unauthorized persons are making use of an abbreviated name similar to their firm name or by a name similar in sound to further schemes for marketing stocks or so called securities indicating that the same are sponsored by James E. Bennett & Co. They assert that no person or firm is authorized to use the name that is not identified with James E. Bennett & Co., located at 300 Postal Telegraph Building, 332 South La Salle street, Chicago.

for a large manufacturer of flour mill machinery, which position he leaves to enter the larger field with the old established and well known Farquhar line.

The Carter-Mayhew Manufacturing Company of Minneapolis, Minn., is completing a new plant at Nineteenth and Jefferson streets, Minneapolis, Minn., for the manufacture of the Carter Disc Separators which have had a very phenomenal sale since their introduction to the trade a few years ago. The new factory is of daylight construction, built of brick and concrete and comprises office and workshop 80x180 feet and foundry 60x100 feet. It is located on the Great Northern Railroad and will give adequate facilities for taking care of the company's expanding business.

In an attractively printed folder recently issued, the Weller Manufacturing Company of Chicago, Ill., shows various types and styles of grain conveyors which they manufacture. There is the well known Weller Spiral Conveyor, the ribbon conveyor, double flight spiral conveyor, spiral conveyor with mixing paddles, ribbon conveyor with paddles, cut flight spiral conveyor, cut and folded flight spiral conveyor, and cut flight spiral conveyor with mixing paddles. The folder is a liberal education in the matter of conveyors for grain elevators. Any one desiring one, together with any of the other literature of instructive character brought out by the Weller house can secure same by writing for it.

A LARGE FOREIGN CONTRACT PLACED WITH CHICAGO FIRM

A contract has been awarded to the Macdonald Engineering Company of Chicago, for the design and construction of an entire system of grain elevators on the American plan for all of Bulgaria. The contract is between the Macdonald Engineering Company, and the Bank of Agriculture of Bulgaria, which is a Government institution organized for the financing and betterment of the agricultural interests.

Included in the contract are a terminal elevator at Varna on the Black Sea, with an initial capacity of 1,250,000 bushels, to be extended later; an elevator of 1,000,000 bushels' capacity at Bourgas on the Black Sea; and a third terminal export elevator of 1,000,000 bushels' capacity at Dedea-gatch on the Aegean Sea. The construction of the last named terminal is dependent upon Bulgaria getting from the Powers favorable action on her application for an outlet to the Aegean, as provided for by the Treaty of Neuilly.

On the Danube River, which is the main artery of trade for the Balkans, there will in the first instance be constructed 12 elevators for delivering shipments to and receiving from river barges. These elevators are to have a capacity ranging from 25,000 to 160,000 bushels each. At interior railroad points the first construction program provides for a minimum of 45 elevators, generally corresponding to American country elevators, with a capacity ranging from 25,000 to 100,000 bushels each. The total storage capacity to be built under the initial program is approximately 12,500,000 bushels. When this amount is completed other

country elevators at different points and with capacities to be decided later, will be built under the contract.

The agreement with the Macdonald Engineering Company includes central power stations, drying plants, wharves, and such other accessory construction and equipment as may be required at the various points. Two flour sheds, each to hold 10,000 tons of flour, will also be built at Varna under the arrangement.

The total contract price is approximately \$10,000,000.

Bulgaria is almost wholly an agricultural country with industrious, thrifty, farmers, who produce wheat, corn and other grains of good quality. The country is capable of exporting in normal years approximately 1,000,000 tons of grain. At present, the physical handling of the crop entails an enormous amount of hand labor, the greater part of which will be eliminated by the American elevator system. The new arrangements will also facilitate marketing, reliability of grades and dependable cleanliness.

The engineering work will be done at Sofia, the capital of Bulgaria, and active construction is expected to start during the 1923 building season. American designers and construction superintendents, experienced in grain elevator work, of which this company has long made a specialty, will be taken to Bulgaria as the nucleus of the organization for that country.

The negotiations with the Bulgarian Government have been carried on by W. Theodore Rivett-Carnac, British associate of the Macdonald Engineering Company, and by Robert P. Durham, vice-president of the company, of Chicago, who has spent much time in Bulgaria in the past two years making the necessary study of conditions.

AN IMPORTANT MEETING ANNOUNCED

Secretary Charles Quinn of the National Association has sent out the following notice:

A conference is to be held in New York City early in January to discuss a reduction in telephone rates.

Henry L. Goemann, chairman of the Transportation Committee of the Grain Dealers National Association, will head a committee composed of representatives of various organizations, which committee will meet with E. K. Hall, vice-president of the American Telephone & Telegraph Company, and discuss the whole proposition of reducing the existing telephone rates throughout the country.

At the New Orleans convention Mr. Goemann was instructed to proceed at once to enlist the aid of other trade associations in a nation-wide effort to have the present burdensome rates reduced. He called a meeting at Chicago on October 17 last. Invitations were sent to 44 organizations and most of them sent representatives to the gathering.

At this meeting it was decided to appoint a committee of five to meet with the officials of the American Telephone & Telegraph Company and discuss the matter of rates and cost of operation.

Owing to the near approach of the holidays it was decided to wait until after the new year to hold the New York conference. The date for the meeting has not been set but it will likely be held some time before January 15.

Chairman Goemann is also engaged in an effort to have enacted into law H. R. 9933 introduced in Congress by Representative Edward B. Almon, of Alabama. The purpose of this bill is to repeal the war tax on telephone and telegraph messages.

The grain trade, as well as all other lines of business that handle the products of the soil are, of course, extensive users of the telephone and telegraph services. The tax on all such messages, coming on top of the high rates themselves, is extremely burdensome at this time when the market prices of all farm products are very much lower than they were when the tax was imposed. All of these high rates and taxes ultimately come out of the producer whose general troubles are now the cause of so much political unrest.

Congress has repealed the war tax on freight

THE AMERICAN ELEVATOR AND GRAIN TRADE

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GRAIN AND HAY SHOW

shipments and also upon passenger fares. There is, therefore, no reason why it should not go further and repeal the tax on telephone and telegraph messages. As a matter of fact the repeal of the tax on freight charges and the tax on telephone and telegraph messages is of much greater importance, and will contribute more to a general revival of business, than the repeal of the tax on passenger fares.

Secretary of the Treasury Mellon, on December 2, made the statement that for the past year the national debt had been reduced nearly three quarters of a billion dollars. The same statement shows a further reduction in the debt for the month of November of \$40,000,000. In view of the fact that the farmers are complaining about the reduced prices they receive for their products and the consumer is finding fault with the high cost of living, the war tax on telephone and telegraph charges should be repealed at once. The repeal of this tax will not effect the Government income as much as the elimination of the freight and passenger taxes.

It is manifest that no relief can come to either the producer or the consumer so long as the cost of doing business is so high. Merchants in all lines are complaining bitterly about the heavy taxation which is blighting business and robbing it of a legitimate profit.

If the Grain Dealers National Association can, through Chairman Goemann and his committee representing various interests other than grain, succeed in having the Almon Bill enacted into law, the way will be cleared, it is thought, for a reduction in telephone and telegraph rates which were increased during the war and have never been reduced. It costs the telephone and telegraph companies many thousands of dollars annually to collect the tax and this expense would automatically stop with the passage of the bill.

HOLLAND'S PLACE IN THE GRAIN WORLD

Holland, before the war, occupied a more important place in the world's grain trade than it does at present. In 1913, 5,262,597 metric tons of grain, all kinds, were imported, while in 1921 only 1,666,531 tons were brought in. The great difference is due to the fact that Holland was a great forwarding

The International Grain and Hay Show, held at Chicago from December 2 to 9 inclusive, in connection with the International Livestock Exposition, was proclaimed the best ever held. The state, Federal, and Board of Trade exhibits were less spectacular perhaps, but they had an educational value that was great. Each one taught a lesson in feeding, growing, fertilizing or other educational line, in a graphic manner which every passerby could not fail but grasp. The Board of Trade exhibit, among other features contained the model of a country elevator which was working all the time



PRIZE WINNING 10-EAR CORN EXHIBIT

and was in skeleton form so that every process of grain handling was clearly visible. As for the grain and hay, it was wonderful.

Perhaps the greatest interest at the show lay in the sweepstakes for the best 10-ear corn exhibit. For the second time Peter J. Lux of Shelbyville, Ind., was the winner with Johnson County White corn, his first honors having come in 1919. He won the Chicago Board of Trade Corn Trophy and the magnificent cup given by the American Manufacturers Association of the Products of Corn. Mr. Lux had close competition. He was the leader in Region 4. The other regional winners were: 1. John Henderson, Cokato, Minn.; 2. C. F. Young, Havlock, Iowa; 3. C. E. Troyer, La Fontaine, Ind.; 5. O. C. Norton, Gainsboro, Tenn.; 6. F. C. Kerr, San Francisco, Calif.

The Grain Dealers National Association trophy for the best single ear of corn was won by Alvan

won by Red Clover and once by Alfalfa. J. L. Krause of Reeseville, Wis., was the winner of the trophy for the best sample of Soy Beans.

While the above were most coveted trophies, representing grand championships, other grain samples deserve mention. The best Durum wheat was shown by J. Cleave of Great Falls, Mont.; Hard Red Winter, by John Howell, Montrose, Colo.; Soft Red Winter, by C. D. Finkbeiner, Clinton, Mich.; White Winter, by A. W. Jewett, Jr., Mason, Mich.; rye, John W. Lucas, Coyle, Alta., Canada; two rowed barley, Nick Taitinger, Claresholm, Alta., Canada; six rowed barley, Ed. Moser, Aberdeen, Idaho; Milo, Fred W. Bieri, Bern, Kan.; Kaffir, J. R. Shelton, Holden, Mo.; cow peas, Fred Cothorpe, Proctor, Colo.; field peas, J. B. Hill, Lloydminster, Alta., Canada; Alfalfa, I. J. Schmeekle, Cozad, Neb.; Red Clover, Lynn Jewell, Leslie, Mich.; Alfalfa seed, Sebens Bros., Milnor, N. D.; Red Clover seed, R. H. Reinke, Buhl, Idaho; Sweet Clover seed, Ben Johnson, Buhl, Idaho; Timothy seed, W. H. Maloney, Donnelly Idaho. All of the samples winning these awards were of the highest class and judges were called upon to make many close decisions.

In all there were over 4,000 samples of grain and hay submitted so that the winning of an award means a great deal. The Chicago Board of Trade has done much to promote the show, giving \$10,000 each year in prizes and taking care of much of the publicity and other work in connection with it.

CRITICISM AND COMMENT

Two editorials in the November called forth the following communication from C. R. Ball, cerealist in charge of the Federal Bureau of Plant Industry:

December 9, 1922.

"I am interested in two items in the issue of THE AMERICAN ELEVATOR AND GRAIN TRADE for November 15, concerning which your editorial attitude seems conflicting.

"On page 341 your comment editorially on the work of the Budget Bureau and the relation of the Departments to it. You seem to indicate that Department officials desire appropriations because they magnify the importance of the officials



SOME OF THE STATE EXHIBITS AT THE INTERNATIONAL GRAIN AND HAY SHOW, CHICAGO

point to Central Europe before the war while now that market is largely cut off, principally on account of the difference in exchange. The 1921 imports, therefore, more nearly represent Holland's home requirements. The domestic wheat crop is about 70,000 tons which represents one-eighth of its requirements. The wheat is soft so that little or none is made into flour without the use of imported hard wheat, the largest source of supply being the United States, 346,416.4 tons in 1921, with Belgium second, Argentine third and Canada fourth.

In fact the United States stood first as a source of supply for all grains. We sent over 59,777½ tons of barley, with Roumania second and Canada in third place; 20,965 tons of oats, with Canada second and Belgium third; 391,792½ tons of corn, with Canada again second and Argentine third; 23,401 tons of rye, Roumania second and Belgium third; 7,722 tons of buckwheat with Japan second.

Mann, of King City, Mo., with an ear of Reid's Yellow Dent. The single ear championship, in the four years it has been awarded, has been held in Ohio, Illinois, Indiana and Missouri. The 10-ear prize has gone to Indiana three times and Illinois once.

The Junior corn champion this year is Glen Phares of Shelbyville, Ind. He took it away from his neighbor Frank Lux who won it last year.

The best wheat was shown by R. O. Wyler of Luseland, Sask. Last year G. W. Kraft of Bozeman, Mont., was the winner, but the two years before the trophy went to Saskatchewan, being won by J. C. Mitchell of Dahinda.

The oats award also went to Canada, J. W. Biglands of La Comb, Alberta, being the winner with a sample of White Victory that weighed 46.5 pounds.

The National Hay Association trophy for the best bale of hay was won by A. W. Jewett, Jr., of Mason, Mich., with Timothy. Twice this trophy has been

rather than because such funds enable the officials to accomplish certain things required or desired by the country at large. On this page you state that 'the grain trade to a man, regardless of politics, will be with the President to a finish,' being with the President meaning, from the context, to support the Budget Bureau in reducing appropriations.

"On page 342 you comment on the recent Conference for the Prevention of Grain Rust held in Minneapolis. I was invited by the Conference to attend the meeting and was present at all sessions. The chief object for which the Conference was organized was to eradicate the common barberry. This eradication campaign is conducted by means of an appropriation made by Congress to the Department of Agriculture and handled by this Office of Cereal Investigations in the Bureau of Plant Industry. The Conference for the Prevention of Grain

December 15, 1922

Rust is co-operating in every way in the prosecution of this campaign and was largely responsible for obtaining the increased appropriation for this purpose which has made it possible for us to clean a much larger area this year than in any previous year.

"On this page you state that the Conference should have the support of every grain dealer, although the Conference is seeking to increase appropriations very largely for this particular item in which it is interested.

"I take pleasure in enclosing herewith some information concerning the progress of this campaign which may interest you and your readers."

The enclose mentioned by Mr. Ball was the report on "Barberry Eradication" by Dr. F. E. Kempton, which was, in part, as follows:

The campaign for barberry eradication was organized in February and March, 1918, by the Office of Cereal Investigations of the Bureau of Plant Industry, United States Department of Agriculture, in co-operation with the following 13 North Central States: Colorado, Illinois, Indiana, Iowa, Michigan, Minnesota, Montana, Nebraska, North Dakota, Ohio, South Dakota, Wisconsin and Wyoming.

A preliminary campaign of education and survey was begun about April 1, 1918, under the emergency appropriation for stimulating agriculture. An appropriation of \$150,000 for barberry eradication for the fiscal year ending June 30, 1919, was approved on October 1, 1918. Since that time eradication has been continued in each of the 13 states.

A Federal quarantine was made effective on May 1, 1919, prohibiting the movement into the eradication area of any barberries known to harbor black stem rust of wheat and other grains. All the states either have found that existing laws covered the situation, have passed amendments to them, or have enacted new legislation.

During the period, April 1, 1918, to June 30, 1922, almost all cities, towns and villages in the entire 13 states of the eradication area were surveyed. The original survey was completed in Montana, Colorado, and Wyoming and a resurvey was begun in these States finding and eradicating sprouts and seedlings appearing since the original survey was completed. The survey is being carried forward rapidly from farm-to-farm and county by county in the other 10 states. In the farm-to-farm survey, approximately 330 counties have been covered. A resurvey of every property on which barberries were found is being carried on, and areas in the vicinity of large hedges or large bushes, either cultivated or escaped, which were old enough to bear seeds when found, were designated for more careful resurvey. A total of 5,625,289 bushes were located on 50,287 properties. Of these 3,296,278 were escaped bushes on 2,440 properties.

A total of 4,457,638 bushes was removed from 46,366 properties. Of the 1,167,651 bushes remaining on 3,921 properties, the greater number is in a few large escaped areas in the States of Wisconsin, Illinois and Michigan. These areas can not be cleared immediately because of their extent and the difficulty of eradication.

EUROPEAN WHEAT REQUIREMENTS

The wheat export capacity of all European countries during the present cereal year will probably not exceed 20,000,000 bushels, according to cable dispatches from Alfred P. Dennis to the Department of Commerce, from Paris. The modest wheat surplus of Poland is of inferior milling quality; Hungary's flour exports will be moderate and at the expense of home consumption. The wheat crops of Yugoslavia and Bulgaria are satisfactory but the export capacity of those countries is greatly impaired by the poor corn harvests. A disappointing corn crop in Rumania will also curtail the exports of wheat from that country. Reports still persist that small amounts of grain will be exported from the Ukraine, but the meager surpluses in that province will be more than cancelled by the deficiencies in other regions of Russia, and to meet the local famine condition imports of grain may be required before the next harvest.

European wheat imports for the current cereal year are estimated at 640,000,000 bushels. Under pre-war conditions about 250,000,000 bushels would have been available from intra-continental sources for the under-provisioned countries of western and central Europe. At the present time the export capacity of those states of eastern Europe producing surplus grain, is only 3 per cent of the import requirements of Europe, as compared with 40 per cent before the war.

The Italian Government has decided to continue the suspension of the import duty on wheat for an

indefinite period. Owing to large accumulated stocks it is estimated that Italy will not need to import more than 72,000,000 bushels of wheat during the balance of the cereal year. The wheat stocks of Great Britain are abnormally low; buyers are holding off hoping for lower prices in view of the big crop about to be harvested in Argentina. Heavy stocks of grain have accumulated in Spain and a limitation upon further imports has been imposed. In Czechoslovakia the grain import requirements for the current cereal year are estimated at 600,000 tons, which will be more than balanced by the heavy exports of sugar and barley. The revised official figures of Germany confirm the prognostication that there would be a severe reduction in the crops of bread-grains as compared to last year. The Saxon Government proposes a 10 per cent admixture of potato-flour with bread-flour, and prohibition of the use of native bread-grains by the manufacturers of beer. It is announced that rationing of bread-flour and sugar will be reintroduced in German Silesia. Increased autumn grain-sowing in France, Belgium, the Netherlands, Italy and Spain is reported. On account of the excessive recent rains, a reduction in acreage is reported in Hungary, Yugoslavia and Bulgaria. From Rumania comes an extremely unfavorable account of the wheat acreage, which is reported to be 40 per cent less than that of last autumn, and the condition of the new sowing in Germany is also stated as unpropitious. The same state of affairs is true regarding the Russian situation where the winter grain acreage is estimated at 16 per cent under last year's. This decline is attributed chiefly to lack of work-horses and oxen.

The widespread agricultural depression in Europe has been brought about by the two successive unfavorable seasons which have been experienced. The British farmers are clamoring for aid from the State, which they may receive in the form of lighter local taxes rather than in tariff-protection measures. The Spanish farmer, too, is demanding aid in the form of increased protection against foreign competition. In Belgium the farmers complain that the prices received for their grain are not commensurate with the increased cost of growing, citing, as an instance of this increase, the high wages of farm laborers and the scarcity of field hands. The German farmers are discouraged by the State requisitioning of their grain at cut-rate prices. The agricultural recovery in the Danubian basin is retarded by the introduction of various forms of State control, which further the interests of the consumer rather than those of the producer of food.

In general, the present indications do not point to any significant expansion in areas devoted to European autumn-sown grains.

REPORT OF THE SECRETARY OF AGRICULTURE

The chief features of Secretary Wallace's annual report, submitted to President Harding on December 5, are the references to the Future Trading Act, the Grain Standards Act, and the Warehouse Act. These sections read as follows:

THE GRAIN FUTURES ACT

In August, 1921, Congress enacted the Future Trading Act, which provided for governmental supervision, through the Secretary of Agriculture, over future trading on grain exchanges. An appeal was made to the courts, and in May, 1922, the Supreme Court of the United States rendered a decision which invalidated the regulatory portions of the Act. The decision, however, pointed the way to the enactment of legislation which should accomplish the purposes of Congress, and such legislation has since been enacted under the interstate power of Congress. The constitutionality of the new Act has in turn been attacked, and pending the decision of the court little progress can be made in its enforcement.

The tax imposed by the act of August, 1921, on transactions known as "privileges," "bids," "offers," "puts and calls," etc., was upheld by the Supreme Court, and the result has been that these transactions have been discontinued. In addition, the Supreme Court expressly stated that its decision did not affect the duty placed on the Secretary of Agriculture by the Future Trading Act to investigate the facts about grain-marketing conditions. Representatives of the Department have therefore been maintained at Chicago and Minneapolis, where they have kept close observation over the operations of

the exchanges and have compiled a large amount of information as to the volume and course of transactions on the exchanges. This information will be helpful in carrying out the provisions of the new law.

The requirements of the new law, which becomes effective on November 1, 1922, are substantially the same as those of the one declared unconstitutional. There is no interference with "hedging" transactions on the boards of trade or with the ordinary speculation or buying and selling of contracts for future delivery. If there should be evidence of undue manipulation or attempts to corner the market, or of the dissemination of false or misleading information about crop or market conditions by members of the exchanges, such matters will be inquired into and promptly dealt with as required by the statute.

The Secretary of Agriculture is given authority to examine the books and records of the members of the exchanges and to require such reports as may be necessary to carry out the provisions of the Act. There is thus an opportunity to make a thorough inquiry into prevailing systems of grain marketing and to secure information which has never heretofore been available, and which is urgently needed before important changes in marketing methods can safely be required.

INCREASED ACTIVITY UNDER THE GRAIN STANDARDS ACT

The volume of business handled by the offices of Federal grain supervision during the past year surpassed by far that handled in any previous year. This is especially true of appeals from inspections originally made by licensed inspectors. During the year 31,689 appeals, or approximately three times as many as the preceding year, were handled by the Department. In addition to the handling of appeals on complaint of parties to commercial transactions, supervisors work in close contact with licensed inspectors, aiding them in inspection problems and in applying the standards. A total of 175,896 supervision samples were handled during the year to check the work of the inspectors in order to secure correct and uniform application of the Federal standards.

The large and steady increase in demand for appeal service, as well as the desired supervision of inspections not made the subject of appeal but to secure correct and uniform application of the standards, has taxed to the utmost the personnel in some of the offices in the larger markets. This situation had become so serious by the close of the past fiscal year that it was found impossible to handle the volume of work, which by its very nature must be promptly and efficiently executed, on the available funds. To avoid a breaking down of the efficient organization which has been perfected, the only alternative was to contract the service by closing field offices. Although serious protest was made by trade organizations and individuals, it has been found necessary to close four of the branch offices.

ADMINISTRATION OF THE UNITED STATES WAREHOUSE ACT

During the past year there has been an unprecedented increase in the number of applications received from warehousemen who operate on a large scale for licenses under the United States Warehouse Act. At the beginning of the past fiscal year there were licensed 238 cotton warehouses, having a combined capacity of approximately 430,000 bales. By the close of the year this number had increased to 268 warehouses, having a combined capacity of 1,210,000 bales. The number of grain warehouses licensed under the Act increased from 56, having a capacity of about 2,110,000 bushels, to 263, having a capacity of about 14,441,000 bushels. The number of wool warehouses licensed under the Act increased from 5, with a combined capacity of 24,375,000 pounds, to 18, with capacity of about 27,500,000 pounds. During the year 14 warehouses controlling space to accommodate 68,395,000 pounds of tobacco were also licensed. Prior to the year 1922 no tobacco warehouses were licensed under the Act. A marked interest developed also among warehousemen in sections in which no interest had been shown prior to this year.

Three important factors have contributed to the substantial progress made along this line during the past year: First, the more general appreciation on the part of bankers of the value of warehouse receipts issued under the Act for collateral purposes; second, the insistence on the part of some of the farmers' co-operative associations that their products should be stored only with warehousemen who were federally licensed; and, third, the recognition accorded the federally licensed warehouse receipt by the War Finance Corporation.

TOLEDO expects to have at least 20 grain vessels with 5,000,000 bushels of grain, in the harbor for winter storage. Like old times.

THE new North Dakota Grain Grading Act is now in effect. In the opinion of the U. S. Department of Agriculture the new law conflicts with the Federal law, but what is Federal law to North Dakota?

NEWS LETTERS

BUFFALO

ELMER M. HILL CORRESPONDENT

GRAIN congestion in the Buffalo harbor is not nearly as acute as it was a month ago. Urgent appeals to the Interstate Commerce Commission at Washington for an increased car supply brought results and the grain has been moving more freely for the last two or three weeks. Efforts made by the Canadian Government to divert grain from Buffalo have met with little success. Steamers of American registry were given permission to land grain loaded at Canadian ports at other Dominion ports in the lake region. Heretofore this had been forbidden.

Comparatively little grain was diverted from Buffalo. Few American lake grain carriers took advantage of the suspension of the Canadian coasting laws to permit these ships to engage in the transfer of cargoes from one Canadian port to another. It was hoped that the suspension of the law would have three-fold results, first by competition it would bring down the freight rates on grain from Port Arthur and Fort William to Collingwood and Port Colborne. The rates on Canadian boats were at least 30 per cent higher than the corresponding rates on grain from Duluth and Superior to Buffalo.

Second, to help the Canadian farmer by facilitating the movement of his crops to Europe. Grain from the Canadian Northwest was either held up at Buffalo due to the clogged condition of the elevators here, or reached Montreal terminal elevators after excessive water freight rates had increased its cost at Liverpool.

Third, to help the Canadian government owned railways having terminals at Collingwood and Port Colborne. It was said they could take care of much of the grain business that was going begging in Buffalo because of the acute car shortage on eastern railway lines.

There will be a great rush in the Buffalo Harbor right up to the close of navigation on the Great Lakes, but the worst of the congestion at the terminal elevators appears to have passed. December 10 was the date set for the formal close of navigation and on that date insurance on vessels automatically expired. Short extensions were made by the insurance companies in some instances and a few wild carriers will operate late in the month without insurance.

At the Buffalo Corn Exchange and at forwarding companies it was stated that practically every bushel of grain loaded by American steamers at Port Arthur and Fort William during the closing days of navigation on the Great Lakes was for winter storage at Toledo, Erie and Buffalo. Early in December there were several days that vessels loadings at the Canadian Head of the Lakes totalled more than 5,000,000 bushels.

The will of the late Spencer Kellogg, head of the great Kellogg linseed oil mills and terminal elevators in the Buffalo Harbor, provides for an estate worth upwards of \$2,000,000. The family home in Delaware avenue is given to the widow for life and the balance of the estate goes to the widow and three sons as trustees.

Down bound grain carriers were delayed at the Soo early in December because of a gale which swept that section of the Great Lakes. Although several big ships were endangered there were no serious losses.

Caught in a furious 50-mile gale early in December, a fleet of five barges, owned by the Inland Marine Corporation of New York, carrying a cargo of 60,000 bushels of wheat from Buffalo to New York, was torn apart and practically destroyed on Oneida Lake. Two of the barges sunk and the others were blown on a sand bar off Verona beach 500 feet off shore. The members of the crew were rescued. The loss is estimated at more than \$100,000.

A special meeting of stockholders of the Grain Handling Corporation was scheduled to be held in the offices of the company at 1317 Chamber of Commerce at noon, December 15, for the purpose of acting upon a proposal to authorize the company to extend its business by making and filing amended certificates so

as to extend the purposes of the corporation. Joseph B. Rogers is president of the Grain Handling Corporation and James C. McAlpine is secretary.

Work has been started on an addition to the terminal elevators of the Superior Elevator Company on the Buffalo River. The new annex will have a capacity of 1,000,000 bushels of grain and when completed the addition will give the Superior Elevator a total capacity of more than 2,500,000 bushels.

The Buffalo bean market has been dull during the last few weeks. Latest quotations at Marrows, new, per 100 pounds, 7.75@8; Medium, new, 7@7.50; Pea, 7@7.50; White Kidney, 9@10; Red Kidney, 8@8.50.

The Buffalo flour market has been strong for some time past with a good demand. Latest quotations in half-cotton sacks, wholesale, are: best patent, 7.75; bakers' patent, 7.50; first clear, 6.50; pastry, 6.75; Graham, 6.75; rye flour, white, 6, and rye flour, dark, 5.75.

There has been a light demand for millfeeds in the Buffalo market in the last few weeks. Latest quotations in less than car loads are: Bran, per ton, 31; Standard Middlings, 32; Flour Middlings, 35; Red dog, 36; Cornmeal, coarse, 37; Cracked Corn, 36.50; Hominy, white, 36; Gluten, 46.50; Oilmeal, 55; Cottonseed meal 57; rolled oats, per barrel, 3.45; buckwheat, local billed, 2.15.

Lack of adequate rail facilities has caused thousands of dollars in business to be lost by local flour mills this season. W. D. Sanderson, traffic manager of the Washburn-Crosby Milling Company, says that his firm alone has lost more than 200,000 barrels of flour because of inability to ship by rail. The barge canal is being used to capacity by Mr. Sanderson.

Fire which swept through the plant of the L. C. Gunson Seed Company of Rochester last month, did damage estimated at more than \$40,000. It is believed the fire started from spontaneous combustion. Two firemen were injured when some material in the storage room exploded.

Henry G. Anderson, well-known grain broker in the Buffalo market, has been re-elected president of the West Side Business Men's Association, one of the most important neighborhood businessmen's organizations of the city. Mr. Anderson has served as president of the organization for a number of years.

Members of the firm of the Eastern Grain, Mill & Elevator Corporation have organized the Eastern Steamship Company, Ltd., at Ottawa, Canada, to operate a big fleet of new steamships in the grain carrying trade between Buffalo, Port Colborne and Montreal by way of the Welland Canal. The company has contracted in England and Scotland for the immediate construction of 10 steel vessels, each of maximum Welland Canal size. These ships will be 253 feet long, 43 feet 3-inch beam with a moulded depth of 20 feet and will be driven by 1,000 horsepower triple expansion engines. Drawing the 14 feet of water which the Welland Canal allows, the ships will each have a carrying capacity of 90,000 bushels of wheat or 96,000 bushels of corn. The vessels will be delivered by the shipyards in April and May of next year and are expected to reach Montreal before June 1, 1923. They will be operated under Canadian registry in the grain trade. They also will be available for cargoes on the upper lakes, and are expected to aid materially in lessening the present congestion which attends the annual movement of grain to the Atlantic Seaboard. Nisbet Grammer of the Eastern Grain, Mill & Elevator Corporation, is president of the new steamship company. Other officers include John J. Raminacher, vice-president and treasurer; Edwin T. Douglas, vice-president; Normal B. Macpherson, secretary; George J. Grammer and John J. Boland, directors. Boland & Cornelius of Buffalo, vessel brokers, will manage the line.

Stockholders of the Electric Grain Elevator Company of Buffalo at a meeting in the office of the company, 321 Chamber of Commerce, voted to increase the capitalization of the company from \$350,000, consisting of 3,500 shares with a par value of \$100 each, to \$735,000, consisting of 7,350 shares with the same par value. O. M. Mitchel is president of the Electric Grain Elevator Company, and Yale Kneeland is secretary of the company.

TOLEDO

C. O. BARNHOUSE CORRESPONDENT

RECEIPTS of grain in this market continue light, in fact cash grain houses in Toledo are shipping coarse grains to many Ohio points for feeding purposes, the feeding value of corn especially being above the market value. Many farmers are buying corn from each other at prices which represent quite a substantial advance over terminal values. Toledo millers report a falling off in the demand for flour and mill feed, although they have orders on their books that will keep them going for some weeks, by which time it is hoped new business will again makes its appearance.

Arrangements have been completed for the mooring of more than 20 grain laden vessels in this port for the winter. This is a much larger number than has been given space here heretofore. They will be cared for at Bay View Park and the various coal and ore docks. Several of them have already arrived.

Mrs. Hester Ingalls, accountant for The Carey Mill & Elevator Company, Carey, Ohio, and Adam Hagenmaier, of Upper Sandusky, Ohio, were united in marriage November 21. They will make their future home in Upper Sandusky.

Rolla Wendt, of The C. A. King & Co., has returned to his desk after three weeks absence in the hospital where he underwent an operation.

Alfred W. Mansfield, of Thomson & McKinnon, has been elected to membership in the Toledo Exchange.

L. G. Macomber, traffic commissioner of The Toledo Produce Exchange, was recently elected regional vice-president of The National Industrial Traffic League and this gives him a place on the Executive Committee of the national organization.

Alphonse Mennel, president of the Mennel Milling Company, Fred Mayer, of J. F. Zahm & Co., and Chas. Keilholtz, of Southworth & Co., attended the fall meeting of the Ohio Millers Association at Columbus. They were accompanied by Edgar Thierwechter, of Oak Harbor, president of the Association.

Fred Jaeger and Kent Keilholtz made a trip to Chicago on business recently.

Raymond P. Lipe of The Raymond P. Lipe Company, and Harold Anderson, of The National Milling Company, transacted business in New York and other eastern cities not long ago.

J. A. Hall, local sales manager for the Weber Flour Mills Corporation of Salina, Kan., announces the addition of the State of Illinois outside of Chicago, to his territory. This gives him Michigan, Ohio, West Virginia, Kentucky, Indiana and Illinois, minus Chicago.

The annual meeting of the Toledo Chamber of Commerce was held in La Salle & Koch's auditorium Monday evening, December 11. Chas. Aubrey Eaton, former editor of *Leslie's*, was the principal speaker.

The Toledo Industrial Traffic League held a meeting at the Chamber of Commerce Tuesday evening, December 12. L. G. Macomber, traffic commissioner, who has just returned from a trip to New York and Washington, reported on the southeastern rate case, improved merchandise service between Toledo and New York and the reduction in the local switching rates.

Raymond P. Lipe, Kent Keilholtz and John C. Husted attended the annual banquet of the Illinois Chamber of Commerce at Chicago, Friday evening, December 8.

The Ohio Farm Bureau Federation, The Ohio Farmers Grain Dealers Association and The Ohio State Grange are holding meetings over the state to create interest among their members in the proposition of a state selling agency for the sale of farm products, especially grain. It is proposed to employ an experi-

enced grain man to manage a state grain handling department and it is expected that the various farm organizations, together with their individual members, will provide the financial news for the organization. Headquarters will be established at Columbus.

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Arrangements are being made for a meeting soon between E. G. Warfield, of the New York and Great Lakes Corporation, C. F. Bielman, of The White Star Line, L. G. Macomber and Toledo city officials to talk over the joint use of the Toledo city docks by the White Star Line and The New York-Great Lakes Transportation Corporation during the coming season. The White Star people have the exclusive use of these docks through a lease for a term of years.

* * *

William W. Cummings, of J. F. Zahm & Co., who has just returned from a business trip through the central part of this state, says that many stations in central Ohio which usually ship out a great deal of corn and oats each season are this year buying these cereals at outside points and shipping them in for feeding purposes.

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The millers of Ohio, Indiana and Michigan together with traffic officials of the carriers traversing this territory met in Toledo, on November 22, to thresh out some transportation matters, among which was the proposition of milling in transit rates and rules.

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The following were recent visitors to the Produce Exchange: L. F. Gates, Rod McKinnon, Frank Wood, C. A. Johnson and G. W. Beavan, of Chicago; A. A. Cunningham, Tiffin; D. W. Mahaffey, Morral, and J. A. Birk of Lorain, Ohio.

DULUTH

S. J. SCHULTE - CORRESPONDENT

CHANGES in the personnel of the management of elevator and grain houses on the Duluth market were few during the last month. The Melady Grain Company of New York and the Peavy Company, with headquarters at Minneapolis, have been admitted to corporate membership on the Duluth Board of Trade. The membership of W. J. McCabe, Jr., has been transferred to Douglas C. Moore of McCabe Bros. & Co.

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Grain houses on this market experienced an active period during the last month in handling receipts earmarked to move East before the close of the lake navigation season. As grain had been kept moving fairly well all fall with the aggregate in store never mounting up to over 14,000,000 bushels, while the elevator capacity is rated at 32,000,000 bushels, no difficulty was experienced in practically emptying the houses by December 12, though the closing navigation limit was set for three days later. Durum and spring wheat were both in demand during the 10 days preceding the close of the lake shipping season, from shippers who had boat space to fill. From 8 to 12 cents over the December price was paid for No. 1 Dark Northern; as high as 17 cents over December for No. 1 Amber Durum, and up to 10 cents over December for No. 1 Mixed Durum. By dint of some hustling all operators succeeded in filling their boat loading contracts. The last cargoes were loaded out on account of the Barnes-Ames Company, and the Cargill Commission Company. The former house was prominent in the Durum market all season, its buying keeping it cleaned up all along. It was regarded as interesting that Amber Durum should have sold up to \$1.13 during the closing days of the shipping season while it sold at around the dollar mark a few weeks previously. A good demand was also found for Red Durum. The Cargill Commission Company was prominent in the rye trade during the entire fall, and it was credited with handling a large proportion of the export trade in that grain.

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Charles F. Haley, manager of A. D. Thomson & Co., lessees of the Great Northern Elevator system, expressed himself as gratified over the volume of receipts here this fall in view of the railroad congestion that had curtailed marketing of grain by farmers over the Northwest. Advices from interior elevator operators afford good ground to hope for an improved movement of grain to the terminals during the next few weeks. He pointed out that as soon as the interior elevators are able to ship out their holdings they would be in position to take in farmers' grain again, thus affording relief all around.

* * *

Albert Sellers, a prominent Fort William, Ont., grain operator, was a recent visitor on the Duluth market. Commission houses and elevator interests at the Canadian Head of the Lakes, have had the busiest fall period in their experience, as a result of the record crops of wheat and other grains over the Canadian West. The crops have been moved to the markets more promptly than was the case with the wheat crop of 1915, the previous bumper year. The best of it was

that it was largely No. 1 wheat, making it an easy export trade proposition, Mr. Sellers asserted. With the extension of insurance coverage to December 20 by the Canadian underwriters extra shipping relief will be afforded, according to Mr. Sellers. In view of the extent of the charterings of boat space he looked for supplies in the elevators being cut down to a minimum by the time the last steamer clears, placing the grain interests in good shape to handle the winter movement from the West, in view of the elevator capacity at Fort William and Port Arthur being rated at around 55,000,000 bushels. To help out, a considerable tonnage of grain is expected to be moved to the seaboard all rail during the winter.

Mr. Sellers drew attention to the fact that additional elevator construction is in sight at the Canadian lake ports during the winter. Included in the new projects is a 1,500,000-bushel terminal elevator to be built at Port Arthur by the N. Bawlf Grain Company, and an elevator being completed at Fort William by the James Stewart interests. Both plants are scheduled to be finished in time to handle next fall's crop. Through that construction the elevator capacity at the Canadian Head of the Lakes will be brought up to around 60,000,000 bushels, Mr. Sellers asserted.

* * *

Officials of the Northwest Grain Growers Association have announced their intention of applying for membership in the Duluth Board of Trade, and H. F. Salyards, president of the Board has intimated that the application would be favorably acted upon by the Board provided the growers will agree to conform with the usual rules. A. A. Jewett, sales agent of the Growers on the Duluth market, asserted that storage space has been arranged for in the elevators here, and that wheat now being held in its pool over the country will be moved here during the winter months to be ready for eastern shipment next spring. "Bullish sentiment is in the air and we hope to realize higher prices for our holdings within the next few months," he said.

* * *

Specialists in flaxseed on this market are looking forward to a larger acreage being seeded to flax over the North Dakota and Montana next spring in view of the higher prices ruling for seed this season. The higher duty in effect under the new tariff is expected to result in promoting the raising of flax in this country and thus cutting down Argentine imports to some extent. Representatives of Spencer Kellogg & Sons and of the American Linseed Company here have been bidding all along this season to cover linseed oil contracts. Stocks of seed in the elevators were practically all cleaned up in shipments made just before the close of navigation. Some seed has been contracted for January delivery to keep crushing plants at Minneapolis going. Trading in the May seed future has, however, been slow so far, attention having been focused upon obtaining supplies for nearby shipment.

* * *

Julius H. Barnes, president of the National Chamber of Commerce, paid a flying visit to this market from New York recently. In conversation with operators, he expressed himself as optimistic over the future of the trade. He drew attention to the steady improvement in sterling exchange and signs of revival in some of the European countries. In his opinion good results may be looked for in the legislation prompted by President Harding looking to improve the facilities for the farmer in marketing his grain abroad through affording better credit facilities.

Mr. Barnes is a warm advocate of the Great Lakes to the ocean project, feeling that it would afford a solution in relieving the congestion that is experienced at Buffalo and other lower lakes ports in handling the grain shipped down from the Northwest during practically every fall when the season's crops are up to the mark. He pointed out that every cent saved in the cost of crop transportation means dollars in the pockets of grain growers.

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Officials of the Minnesota State Grain Inspection Department here have been gratified over the continued high grading of grain coming into the local elevators. Spring wheat so far received has graded up high, and the great bulk of the Durum marketed has graded Amber and Nos. 1 and 2. They are sanguine that the wheat held by farmers who lacked proper facilities for storing it, will not show damage through deterioration to the extent that had been feared. They pointed out that even in the case of wheat piled out on the ground, moisture is unlikely to penetrate beyond the outer fringe, provided it is handled promptly. Ample facilities are available for drying out any damp grain that may come in here from the country.

* * *

Considering the congested transportation situation, a good showing was made in the movement of grain to the Duluth market during the present crop year up to this time. Receipts of all grains from August 1 to December 9 aggregated 76,695,892 bushels against 59,294,793 bushels up to the same period last year. Wheat receipts accounted for 38,901,920 bushels against 38,430,097 bushels. Corn and oats movement both fell off, the former amounting to 1,778,260 bushels against 3,072,259 bushels and the latter to 821,401 bushels against 2,390,077 bushels. Barley

receipts were 2,950,879 bushels against 3,797,496 bushels. Marketings of rye were swelled up to 29,495,302 bushels against 9,374,626 bushels. Flaxseed receipts more than held their own, amounting to 2,748,230 bushels against 2,223,818 bushels last year.

* * *

E. N. White of the White Grain Company recently commented upon the better inquiry being received from over this district for feedstuffs of all kinds. The market in millfeeds has been strong of late in line with the upward swing in wheat prices. He said that he looked forward to more liberal marketings of coarse grains by farmers during the next few months, as prices are now upon a better level and the shortage of freight cars appears to be easing up.

CINCINNATI

HARRY A. KENNY - CORRESPONDENT

RECEIPTS of hay at Cincinnati, instead of averaging about 50 cars a day, have ranged from one to 10 cars, and the result is a scarcity of hay in this market. Some of the hay dealers have written to Congressman Nicholas Longworth asking him to aid in getting a larger supply of hay into Cincinnati, and Mr. Longworth has taken the matter up with the Interstate Commerce Commission.

There is plenty of hay in the country, but on account of the shortage of box cars there has been difficulty in getting adequate supplies to the city. During the last week in November an average of four cars of hay arrived in this market daily, when the trade ought to be getting 50 or 60 cars a day at this time of the year. The largest shipment of hay to be received here in the past month was on December 7, when 41 cars arrived. Thirty-seven of these were promptly bought, showing that the market here can absorb large shipments of hay. The price continues from \$17 to \$19 a ton for good Timothy.

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Traders in wheat were more inclined to the buying side of the market as a result of the generally bullish character of the news, and new high levels were recorded for December and May with cash prices also at the top of the crop. The spot market, however, was slow to follow the option advances and buyers were more disposed to await recessions before making purchases, but the demand from mills in the South or inquiries for export were generally less active and only small quantities were reported sold from Missouri primary points, and only an occasional car taken from the local market. Receipts continued very disappointing due to the annoying transportation conditions as country advices indicated that farmers were anxious sellers if cars were available.

The corn situation is very strong and prices are undoubtedly the highest for the present crop because of the car situation. Feeders throughout this territory are eager for shelled or ear corn and in many instances are willing to pay fancy prices for immediate delivery. Offerings of oats continue very small but the demand is only moderately active and the firmness of the market principally due to the strength shown in the other grains.

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Nearly 300 empty box cars were held on sidings outside of the city during the past month awaiting return to their lines in the west.

At a meeting of the Board of Directors of the Cincinnati Grain and Hay Exchange, on December 1, the action of the members in voting to reduce the commission on oats from 1 per cent of the gross amount, with a minimum charge of \$15 a car to 1 per cent of the gross amount with a minimum charge of \$10 a car was approved. The directors also eliminated a ruling that requires the charging of interest on advances made on purchases F. O. B. shippers' track. Under a new ruling adopted, it will be a matter of agreement between the purchaser and disposer of grain as to when a draft shall be paid and whether any interest should be charged. The two rulings were formulated at a trade meeting held at the Hotel Metropole, on November 29. The meeting was preceded by a dinner in the banquet hall. During the course of the meal, William B. Riley, of the McQuillan Co., hay dealers, and Chairman of the Entertainment Committee entertained the members with vaudeville stunts from his own chorus of entertainers. Chairman Riley promised a final social for the members and their employes on December 31. The annual meeting of the exchange will be held early in January.

* * *

Edward E. Lester, 57 years old, secretary of the J. M. McCullough Sons Company, seed merchants, collapsed and died at his desk, on December 2. Apoplexy was the cause of death. Mr. Lester lived in Pleasant Ridge, a suburb of Cincinnati with his wife, and brother, Melvin Lester and a foster son, Conrad C. Ornes, a student at the University of Cincinnati. Mr. Lester was born in Pleasant Ridge and lived there all his life. He was known to every resident of the community

and had thousands of personal friends in Cincinnati. He had been associated with the J. M. McCullough Sons Company for 29 years and had hundreds of friends in the business world. Mr. Lester went to his office on the morning of December 2 and after dictating several letters to his secretary, started to rise from his chair. Instead he slumped forward and collapsed on the desk. First aid was given him immediately, and physicians were summoned, but he was dead when they arrived. Mr. Lester always took an active part in the civic and religious affairs of Pleasant Ridge and Cincinnati. He was Past Master of the Pleasant Ridge Masonic Lodge; President of the Board of Trustees of the Pleasant Ridge Presbyterian Church, and a member of the Pleasant Ridge Welfare Association.

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The Oakley Coal & Feed Company, located in Oakley, a suburb of Cincinnati, will discontinue its grain and feed business, on January 1. The company, which is managed by Frank and Walter Cramer, will handle coal exclusively on a retail basis.

* * *

The Van Leunen Company, grain dealers with offices in the Neave Building, has closed out its business. A. Bart Horton, general manager of the Cuvier Press Club, was appointed receiver for the concern two months ago. The company's inability to move grain because of the acute car shortage is responsible for its failure. The company has disposed of its membership and share of stock in the Cincinnati Grain & Hay Exchange.

* * *

Henry Hoffman, owner of the Hoffman Seed & Feed Company, Monmouth street, Newport, Ky., has disposed of the business to Walter Lang and J. B. Kettnacher, Newport business merchants. Mr. Hoffman will leave with his wife and son for Seattle, Wash., shortly after the New Year, where they will make their home.

* * *

Frank Watkins, manager of the local office of the Cleveland Grain & Milling Company, returned on December 7 from a three weeks' business trip in Indiana and southern Illinois.

* * *

William R. McQuillan, of The McQuillan Co., hay dealers, and W. L. Brown, grain dealer, both exhibited home-grown strawberries of excellent growth and ripeness on the floor of the Cincinnati Grain & Hay Exchange last month as evidence of the summer like weather prevailing in these parts.

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H. Lee Early, president of Early & Daniel Company, accompanied by Mrs. Early, has departed for the Pacific Coast where they will enjoy the holiday period with their daughter, a resident of Medford, Ore.

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F. N. Winkler of the Mutual Commission Company, spent the major part of last month calling upon the hay shippers in northern Ohio.

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Henry Brouse, vice-president and treasurer of the Perin-Brouse-Skidmore Grain & Milling Company, has returned from an extended trip through the central part of Ohio in the interests of new malted dairy feed, manufactured by the company.

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E. E. Danneman, flour and grain broker with offices in the Gerke Building, has purchased for \$65,000 the three-story wire-cut building at the southeast corner of Seventh and Main streets. The building stands on a lot 19x98 feet and is located in the heart of the business district. Mr. Danneman said that he purchased the property for investment purposes.



IT IS an unfortunate thing that business men in general rarely manifest the keen interest that they should in the election of candidates to hold public office or to the selection of the right man to become the heads of important departments. Therefore it is pleasing to find that a great many prominent business men, not to mention lawyers, bankers, etc., are manifesting deep interest in the selection to be made by Governor-elect Alfred E. Smith for the office of Superintendent of Public Works. That business men do occasionally awaken to the importance of endeavoring to get the right man at the head of departments which concern them closely in their business affairs, was demonstrated by the fact that a petition signed by 34 prominent grain merchants, and jobbers, members of the New York Produce Exchange, had been sent to the coming Governor advocating the appointment of Edward S. Walsh to the office of Superintendent of Public Works. Suitable resolutions of similar character were forwarded also by the Maritime Association of the Port of New York, as well as similar organizations located in various cities throughout the state. Similar endorsements have been sent by two of the most prominent friends and advocates of the Erie Barge Canal; men who have probably done more to bring about the great improve-

ments made in that remarkable waterway than any other two citizens, namely Honorable George Clinton, and Honorable Henry W. Hill, both leading lawyers of Buffalo. Mr. Walsh has been in the canal transportation business since boyhood and is now general manager of the New York Canal & Great Lakes Corporation. He is also Chairman of the Canal Committee of the New York Board of Trade and Transportation, and Chairman of the Canal Committee of the State Maritime Association of the Port of New York, and a member of The Barge Canal Conference Committee. During the time Mr. Walsh served as Superintendent of Public Works, 1919-1920, he filled that important office so efficiently to the great satisfaction of all concerned, that practically all business men, shippers, etc., members of the New York Produce Exchange, and similar organizations throughout the state, are thoroughly convinced that he would again fill that important position with credit to himself and to the gratification of all concerned.

* * *

I enjoyed a highly entertaining chat with my esteemed friend, Henry L. Goemann, recently while he was visiting his many friends in the local grain market. Mr. Goemann came here from Mansfield, Ohio, primarily to attend the annual dinner of the National Industrial Traffic League held at the Hotel Commodore. I agree with Mr. Goemann's friends that he is one of the most indefatigable workers, and besides is decidedly unselfish as a large part of his work is for the benefit of the trade in general.

Recently a large part of his time has been taken up as head of the Transportation Committee of the Grain Dealers National Association,—which means in a nutshell that he has a great deal to do in following up the affairs of the Association and its members with regard to telephone and telegraph charges, transportation troubles, and necessary legislation bearing on these matters. He gave me much data of interest to business men generally and particularly anent the dissatisfaction prevailing among agricultural interests in the interior.

Unfortunately space is too limited to go into all the details; suffice it to say that Mr. Goemann stated in substance that the trouble and dissatisfaction prevailing among farmers was largely brought about by the abnormally high prices current for farm lots and real estate generally throughout the interior as a result of the boom largely growing out of the war. Roughly speaking, the price of land and, of course, rentals, had gone to such a high level, and had not receded materially, that farmers had not been able to keep pace in view of the decline in farm products.

In short the farmer has to pay nearly as much for every thing he buys as he did during the war or soon after, whereas he receives a great deal less for his grain, etc. Manifestly the storekeeper or dealer from whom the farmer buys has been paying too much rent and therefore has charged the farmer more than the latter can afford to pay out of the receipts from his crops. Evidently a readjustment is bound to occur as the country as a whole can not prosper unless the farmer succeeds.

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A. T. Martin, for many years a member of the New York Produce Exchange, but now a partner in the well-known grain commission house of Bartlett Frazier Co., Chicago and New York, was welcomed back on 'Change by his many friends late in November. Mr. Martin had just returned from a 10 weeks' trip in Europe and stated that he found economic conditions generally unsatisfactory and believed large imports were necessary, but the scarcity of money was a drawback. On the other hand he thought that recent elections in the United Kingdom created a more optimistic feeling, notably as regards political relations between Great Britain and France.

* * *

E. D. McDougal, vice-president of the Armour Grain Company, and brother of Robert McDougal, president of the Chicago Board of Trade, received a cordial welcome on 'Change late in November on his return from a three months' pleasure and business trip in Europe. He stated that of the many perplexing problems confronting Europe one of the most serious was the food supply. The yield had been unsatisfactory both as to quantity and quality, and hence he believed import requirements would be heavy, greatly in excess of last year. In his judgment the American people will not allow Germany, Austria and other countries of Europe to suffer actual starvation, but will, as they have in the past, should such exigency demand, offer succor, either by voluntary contributions or by the extension of some system of credits.

* * *

Wm. H. Mitchell, one of the active heads of the export department of the Hecker-Jones-Jewell Milling Company, received a hearty welcome back on 'Change from his fellow members, as he had been unable recently to attend to business on account of serious intestinal troubles. The writer had a pleasant chat with Mr. Mitchell and was fortunate to gather some highly interesting facts of wide general interest. Briefly, much has been heard publicly of the fact that Dr. Copeland, at present at the head of the New York Health Department, and U. S. Senator-elect, will be the first M.D. to hold that high office. At least this is generally supposed to be true, but the supposition proved to be erroneous as Mr. Mitchell's great-grand-uncle, Dr.

Samuel Lathan Mitchell, was congressman from New York City, from December 1, 1801, to November 23, 1804, and was then appointed to fill a vacancy in the United States Senate from New York, owing to the resignation of John Armstrong, and was Senator until March 3, 1809. Subsequently he again served as Congressman from New York City until March 3, 1813.

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Wm. J. Seligman, son of the late W. L. Seligman, who was a member of the Produce Exchange, and vice-president of the George Urban Milling Company, Buffalo, N. Y., of which company the young man has recently become secretary, has been elected to membership on the Produce Exchange.

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Iwajiro Suzuki, head of the great steamship and trading firm of Suzuki & Co., gave a dinner at the Hotel Biltmore on December 1, to about 40 representative members of the principal American interests with which the firm comes in contact.

Mr. Suzuki, after a fairly lengthy trip through Europe, arrived in New York on December 1, and found that it was necessary to leave almost immediately for Japan, and gave this dinner to business connections in order to meet as many as possible personally before leaving for home. In addition to its large trading interests,—the firm is possibly the largest steamship operators in the World except the U. S. Shipping Board.

* * *

Lang-Hughes Company, Inc., is the title of a new firm recently formed in New York, largely for the purpose of promoting export trade in flour. Its officers are, H. Lang, president; H. F. Hughes, vice-president; F. O. Seaver, treasurer, and J. Seaver, secretary. It seems gratuitous to say that all of these officers are thoroughly familiar with the flour trade. This, however, is particularly true of F. O. Seaver, as he has been one of the leading men in the European relief associations since the war stopped.

* * *

John Kemp was welcomed back to his post on 'Change early in December having just returned from his wedding trip and therefore was in receipt of hearty congratulations. Mr. Kemp is secretary of the old grain commission and export house of Milmine, Bodman & Co., Inc. He is the son of Wm. H. Kemp, one of the leading members in the same firm and formerly president of the Produce Exchange.

* * *

An exceedingly interesting development early in December was the clearance from Montreal of 538,000 bushels of wheat in bags for North Africa. This was particularly important not only because of it's being unique, but also because the grain had to be put in bags, because it was necessary to take the wheat by lighter from the vessel to the shore, there being no facilities of unloading by elevator.

* * *

Recently a large gathering of members was noticed around the flour tables of Holt & Co., on the Produce Exchange. In the main this crowd was composed of flour and grain dealers, because they were particularly interested in the loaves of bread exhibited on the tables. As stated by Holt & Co., this was an interesting demonstration of the truth of their theory that flour for tropical climates should be specially milled of strictly sound wheat without either tempering the wheat or bleaching the flour, artificially to improve its appearance.

A sample of flour shipment made on the S. S. *Dominic* on November 11, 1915, to Brazil, had inadvertently been retained among their sample files in their warehouse, from that time until last week, a period of 7 years. With no other protection than the ordinary paper sample bag during these years, it has been found upon examination not only in the duct and the dough but in the baked loaf to be sound and free from any sign of worm or weevil. The bread baked without admixture of other flour was a well raised loaf of good texture, sweet and of excellent flavor.

* * *

Archibald R. Dennis and J. Murdoch Dennis of the old Baltimore grain exporting firm of Dennis & Co., who recently joined with Robert G. Brandt of the New York Produce Exchange in the formation of the firm of Dennis, Brandt & Co., for the transaction of a grain commission business here and in Baltimore, have been elected to membership in the Produce Exchange.

* * *

The Board of Managers of the New York Produce Exchange has elected the following applicants to membership: Samuel Mincer, grain commission merchant of Chicago; B. L. Harrington of Webb & Kenward, Inc., grain exporters; A. J. J. Vedde of the Hansen Produce Company, grain merchants; Raymond J. Barnes of the Philadelphia Export Company, grain exporters; Eugene V. N. Bissell of the Continental Grain Company, exporters; Michael J. Roe of B. F. Schwartz & Co., grain commission; Leo Brager, broker.

* * *

The following applicants for membership in the Produce Exchange have been posted: Albert E. Scoltock, Jr., of the Norris Grain Company, Chicago and New York; George E. Dudman, distributor of cereals and flour.

* * *

Among the visitors on the Produce Exchange lately was C. H. Gibson, broker in cash grain on the Chicago Board of Trade. Mr. Gibson is also vice-president of W. P. Anderson & Co., Inc., grain commission merchants Chicago. Mr. Gibson stated that there had been a

gratifying increase in the supply of freight cars recently, in fact, they had more cars than needed and hence some had gone back to the South and Southwest. He asserted that the scarcity of engines has been far more of a hindrance than the shortage of cars.

* * *

P. J. McCullough, who previously represented Fearon & Brown, exporters and importers, on the New York Produce Exchange, recently severed that connection and now represents the firm of L. & E. Frankel, Inc., who are also exporters and importers.

* * *

Frank L. Carey, one of the active members of the Nye-Schneider Grain Company, Chicago, paid a brief visit to friends in the grain trade on the Produce Exchange early this month.

* * *

Henry C. Gibbs, who for several years was active in the local grain trade and afterwards at Winnipeg, but who retired from active business a few years ago, and is now located at Montreal; was on 'Change lately and received a hearty welcome.

* * *

R. W. McKinnon, of Thompson & McKinnon grain and stock brokers of New York, and Chicago, was among the visitors on the Produce Exchange late in November.

LOUISVILLE

A. W. WILLIAMS - CORRESPONDENT

GENERAL reports indicate that business with the Louisville hay and grain trade is more active than it has been, the elevator operators reporting good business, while the jobbers claim that there is a better volume of business out in the state as well as locally. Retailers as a whole are very well satisfied with the present situation.

With corn selling at around 75 cents a bushel farmers are more prone to buy feed this year, and it is reported that feed demand is good and getting better, even at prices around \$30 a ton and better.

Reports on Winter wheat acreage in Kentucky vary, but reports on good authority claim that acreage will show a reduction of nearly 40 per cent this year, over normal acreage, due to the fact that farmers are sick of raising wheat for \$1.10 a bushel, when corn is bringing fancy prices, along with tobacco, sorghum and other crops.

* * *

The Kentucky Public Elevator Company reports that there isn't much change in the general situation; locally the company is handling an average of 12 to 15 cars of grain daily at the present time, while corn is being dried at a good rate, running as high as 30,000 bushels a day, while grain on storage runs into fair figures. At the present time the company shows 433,000 bushels of grain in hand, including 370,000 of wheat, 53,000 of corn, and 10,000 of oats. A material increase in corn holdings is likely, in view of the fact that it is valuable this year, and growers are anxious to get it into safe quarters.

Corn is running from 19 to 21 per cent moisture in most cases, resulting in its being dried down to around 14½ per cent moisture when received here.

* * *

That the milling business is active is shown by reports of the Ballard & Ballard Company, a concern which is operating at 90 per cent of capacity, when the average for the Southeastern Millers Association is only 62 per cent.

* * *

The Gold Proof Milling Company is making fair headway with its new storage space, having run up its new concrete tanks to the top, and building of the work house is now under way. It will probably be 30 to 60 days before the plant is completed.

* * *

O. W. Edinger, of Edinger & Co., reports fair demand in a jobbing way for hay, corn, oats and feed. Hay movement is light as railroads are not furnishing cars freely for hay, when other commodities, making heavier loads are waiting movement.

* * *

Local cash prices show bran at \$29 a ton; mixed feed, \$29.50; middlings, \$33; No. 3 corn, White and Mixed, 75 cents; Yellow, 76 cents; Oats, No. 3 White, 49 cents; Wheat, \$1.37 @ \$1.38; Hay: No. 1 Timothy, \$19.50 a ton; No. 2, \$18; Mixed, light, \$19; No. 1 Mixed, \$18; No. 2, \$15; Clover, No. 1, \$18; No. 2, \$16; wheat and oat straw, \$11 @ \$12; rye straw, \$12 @ \$13.

* * *

Amended articles of incorporation have been filed in Louisville by the Washburn-Crosby Company, and its subsidiary the Louisville Milling Company, setting out the authorized activities of the companies, etc., but not affecting the general policy materially.

* * *

It is reported that the American Hominy Company, of Chicago, has negotiations pending for the purchase of the fine local plant of the Wathen Milling Company, designed as a corn mill, built about four or five years

ago, and down for the past three years or more. The Wathen interests of Louisville in building this mill utilized but one side of the building, leaving floor space open on the other side for future development of whatever grain project that the company might later determine. The plant is well constructed and equipped, but got in late for the war time corn rush. It is reported that the Chicago company wants to buy the plant outright, or operate it under a lease agreement.

* * *

Fire at Owensboro, Ky., recently burned the feed store of Gess Moseley and the adjoining feed store of C. R. Rhodes, the total loss being around \$10,000, partially insured.

* * *

Fire at Versailles, Ky., on Nov. 16, destroyed the grain and feed plant of Cleveland & Co., the loss being around \$20,000, consisting of hay, straw and wheat principally. The plant was formerly a depot of the old Louisville & Eastern Railroad, now owned by the Louisville & Nashville Railroad, and under lease to Cleveland & Co. The company's offices and mills across the railroad tracks, and the Farmers Union Mills, owned by former Senator Johnson M. Camden were threatened by the blaze.

* * *

Louisville grain men are not taking very seriously the bill of Representative Little, of Kansas, for control of wheat and bread prices, as there is certainly no more reason to have Federal control of wheat than of any other food product during normal times.

* * *

M. W. Brumleve, secretary-treasurer of Callahan & Sons, Louisville elevator operators, in a recent statement in the press, in connection with a series of articles showing that it aids boys to carry papers as youngsters, stated that personally he carried papers for about six years, and believes that it broadens a boy's knowledge and gives him some early business training, because he does other than merely play, getting some business experience before other boys of his own age. Mr. Brumleve in part said: "It is work that can't hurt a boy and it amounts to practically a boy being in business for himself. He obtains actual business experience at first hand, years before other boys are devoting any thought to it."

KANSAS CITY

B. S. BROWN - CORRESPONDENT

EXPORT activity at the Gulf ports the past few weeks has been confined to occasional short covering or to small sales to complete cargoes. Prices at Galveston and New Orleans generally have followed a lower trend, relative to interior markets, while stocks there have accumulated. Dealers say the outlook for a revival in trade is not very promising. Closing of lake navigation the middle of the month will check demand for Canadian wheat, but liberal stocks will have accumulated at the seaboard by that time and will supply requirements for some time. The recent decrease of more than 11,000,000 bushels in the Canadian visible supply, due to lake shipments, is an indication of what may be expected along this line, it was said. Stocks will not prove burdensome however.

* * *

Receipts of wheat at Kansas City last month were 4,847 cars, about 7 per cent less than in October and 51 per cent more than in November of last year. Compared with the 10-year November average there was an increase of about 5 per cent. Receipts of corn and oats exceeded those of the preceding month, a year ago and the 10-year average by substantial margin.

The movement of wheat to this market continues to be restricted by the shortage of cars. Country elevators along nearly all lines in the Southwest are full and are clamoring for more cars, a condition that has prevailed for many weeks. Numerous steps have been taken to secure relief, but the net results have been negligible. Orders for the return of cars from eastern roads have caused a little local relief here and there.

The belief now is that there will be no changes of importance in the transportation situation until seasonal demand for cars begins to ease. This has already started in some sections. With substantial quantities of grain accumulated at country points, many receivers think there will be fairly liberal movement to this market during most of the winter, probably well above the average. Elevator stocks of wheat at Kansas City have been small all season and doubtless will continue so until harvest. Mills as a rule have only moderate supplies on hand.

* * *

The season's first car of new corn was received November 13 by the Nye-Jenks Grain Company from Rulo, Neb. It graded No. 2 Yellow and sold for 72½ cents.

* * *

D. F. Piazzek, retired grain dealer and former official of the United States Grain Corporation, has accepted the position of manager of the Kansas City Milling Company, representing the interests of the Commerce

Trust Company. Charles Rock, former manager of the company, resigned to become manager of the branch house department of the Ismert-Hincke Milling Company. J. B. Nicholson, formerly with the Kansas City Milling Company, is now with the sales department of the Kansas Flour Mills Company. H. G. Burke will take over the position of sales manager of the Kansas City Milling Company.

* * *

B. C. Christopher & Co., recently sold a car of Kaffir corn to a Toledo firm as a result of an inquiry sent out by radio, probably the first transaction of that kind at this market. The request for an offer was broadcast from Toledo with the request that it be given to the Christopher company. A doctor picked it up and telephoned it to that firm in the Board of Trade Building.

* * *

The Advertising Committee of the Board of Trade met recently to hear complaints against the rule prohibiting the use of souvenirs or other articles of momentary value for advertising purposes and decided to make no changes in the regulation, at least for the present.

* * *

Dilts & Morgan have opened a branch office in Ft. Worth, Texas, in charge of C. G. Wilkinson, formerly with the main office in Kansas City.

* * *

Earl G. Wallingford of the Wallingford Bros. Grain Company has been elected a member of the Kansas City Board of Trade on Transfer from Fred Warrick of the same firm.

* * *

Recent competition for good milling wheat at country points in the Southwest has caused irregular advances above the Kansas City basis, according to local receivers. At one time good wheat at Wichita was 2 to 3 cents above the Kansas City basis and at Hutchinson and points to the west it was as much as 3 to 5 cents over the local basis. Premiums also were paid for good wheat in many parts of Oklahoma and in other states, it was said.

* * *

Initial deliveries on December contracts at Kansas City were limited to a few small lots of oats. Wheat has been above a delivery basis for some time and little if any will be turned over.

* * *

Kansas farmers had 41,000,000 bushels of the 1922 crop in their hands on November 18, which represents 35.5 per cent of the harvest of 116,750,000 bushels, according to estimates sent to the State Board of Agriculture. In the eastern part of the state, the advices indicated, the wheat is being held voluntarily for higher prices, but in the western counties the car shortage is responsible for the holding attitude. At this time last season farmers held 21.3 per cent or 27,339,000 bushels; two years ago, 55 per cent or 77,000,000 bushels; three years ago, 35.5 per cent or 50,000,000 bushels.

* * *

A recent duck hunting trip of five members of the Kansas City Board of Trade nearly ended with a tragedy. Ralph Orthwein, W. H. Burns, Frank Everts, Orin Hayward and William B. Lathrop went to Waukenda, Mo., on a Saturday night. From there the party went to a hunting lodge of Mr. Orthwein's five miles northwest and on the Missouri River. Early the following morning, Burns, Hayward and Everts started up the river in a small boat for a shooting blind. It was still dark. After going a mile the boat struck a swift current about 50 feet from shore and turned over. Burns, although encumbered with hip boots and a heavy hunting coat, swam ashore. The other two stayed with the boat. The boat drifted down stream more than a mile with Hayward and Everts clinging to its bottom, before they were rescued. The three who were in the boat lost guns, decoy ducks, ammunition and clothing. None suffered ill effects from exposure.

* * *

A jury in the Circuit Court at Kansas City recently returned a verdict in favor of the Fuller Grain Company which was being sued by the Brush Farmers Cooperative Elevator Company of Brush, Colo., for the recovery of \$2,200. The Brush company sought to repudiate five different grain deals made on the Board of Trade at Kansas City by their manager at Brush, Colo., through the Fuller Grain Company. The Brush company lost \$2,200 on the deals, which were alleged to have been made by the manager without authority or knowledge of the company. The Brush company alleged the manager did not intend to receive the grain as he claimed.

* * *

Members of the Kansas City Board of Trade recently defeated an amendment to the State constitution which would permit a receiver with grain enroute to Kansas City to accept a country bid of another member of the exchange for a similar grade and apply the incoming shipment in filling the contract. Elevator interests were against the proposition. It was said the rule would prove effective on a short time during the year. At the same time the following proposition was voted upon and carried. If re-inspection sustains the original inspection, the re-inspection fee and all expenses that may accrue as a result of the call must be paid by the party calling for re-inspection; if the grade is changed the other party must pay the expense.

THE AMERICAN ELEVATOR AND GRAIN TRADE

Forty-First Year

MILWAUKEE

C. O. SKINROOD - CORRESPONDENT

THE continued plaint of the grain trade at Milwaukee is lack of cars. From every quarter comes the comment on the lack of facilities, just when the grain trade movement is normally at the maximum for the year. Grain handlers state that while there has been some improvement in the car situation, there are few cars as compared with the great need for them.

Another dominating note in the grain trade at this time is that not only are cars scarce, but that such a large proportion of the cars furnished are out of order and actually unsuited for the carrying of grain. Grain men declare that the effects of the shop strike on the railroads is far from worn off as yet. Months having expired since the shop strike was ended, it was generally believed that most of the grain cars would be repaired long before this. Apparently there is no eager disposition on the part of the railroads to clear up the bad order car situation, grain men assert.

Receipts for the first week ending in December were 896 car loads of grain, as compared with 575 cars in the previous week, 480 cars loads for the corresponding week a year ago, and 515 car loads for the corresponding week of 1920. While offerings of grain are somewhat ahead of a year ago, the monthly reports show that is rather an isolated instance and does not represent any important increase in receipts.

Receipts for the week given were made up of 155 car loads of barley, 125 cars of corn, 365 car loads of oats and 72 cars of rye. Other receipts included 4 cars of flax and 15 cars of miscellaneous stuff. Oats, barley and wheat are the principal grains offered at the present time and receipts of corn are beginning to show some definite increase.

The latest monthly report on Milwaukee grain receipts shows 259 cars of wheat, 627 car loads of corn, 972 car loads of oats, 594 cars of barley, 325 car loads of rye, making total grain offerings for the month of 2,777 car loads. Other receipts included 41 cars of flax seed and 60 cars of miscellaneous. The total for grain, flax and miscellaneous was 2,878 car loads.

Shipments for the first week ending in December indicate a moderate movement of grain outward. The total was approximately 646,000 bushels, made up of 81,000 bushels of corn, 319,000 bushels of oats, 90,000 bushels of barley, 63,000 bushels of wheat and 91,000 bushels of rye. Practically half of the week's shipments were of oats. The shipments of grain for the week mentioned of 646,000 bushels compared with 722,000 bushels in the preceding week and 499,000 bushels in round numbers for the corresponding week a year ago.

Grain in store at Milwaukee at the opening of the present month was given at 103,000 bushels of wheat, 141,000 bushels of corn, 476,000 bushels of oats, 103,000 bushels of barley and 54,000 bushels of rye. In other words more than half of all the grain in store was oats.

Milwaukee stocks of flour have taken a sudden slump again at the opening of December, with only 18,000 barrels compared with more than 53,000 barrels just a month ago. A year ago the Milwaukee stock of flour was 38,000 barrels. The flour supply is close to the low yearly record for this time of the year.

The flour milling activities of Milwaukee are down to a minimum, the last weekly report showing an output of only 1,000 barrels of wheat flour, compared with a production of 11,500 barrels in the previous week and 4,500 barrels for the corresponding week a year ago. The output of rye flour, according to the last weekly Milwaukee report, was 1,500 barrels compared with 2,000 barrels for the previous week and 1,250 barrels for the corresponding week a year ago.

The December rate of interest has been fixed by the Finance Committee of the Milwaukee Chamber of Commerce at 6 per cent. This is a gradually lowering rate indicating that money conditions are steadily growing easier.

Some very decisive increases in grain prices paid at Milwaukee are being shown in the comparative reports with the prices a year ago. No. 3 barley is now quoted from 67 to 73 cents as compared with 57 to 64 cents for the same grade for the corresponding date a year ago. The market is 9 cents higher than last year, or about 14 to 15 per cent advance over the fall of 1921. No. 3 White Oats is being quoted at 42 to 45 cents as compared with a

quotation of 33 to 36 cents for the corresponding time a year ago. No. 2 Rye is now being sold at Milwaukee at 83 to 85 cents a bushel as compared with a ruling price of 88 cents for the same grade a year ago.

No. 2 Yellow Corn has been selling in Milwaukee at 71 to 72 cents as compared with a price of 49 to 50 cents for the corresponding time a year ago. Here is the most striking advance yet encountered, with a gain of no less than 22 cents a bushel, or approximately 44 per cent over the prices a year ago. No. 1 Northern wheat has been quoted recently at Milwaukee at \$1.24 to \$1.32 as compared with a price of \$1.34 to \$1.40 for the corresponding time a year ago. Here is a decline from last year of about 8 cents a bushel, or about 5 per cent.

This comparison shows that corn takes the dominating lead for huge gains over prices last year. Corn is represented by a price boost of about 44 per cent as compared with a 25 per cent gain reported in the oats market and a 15 per cent gain in the barley trade. Slight declines of 4 to 5 per cent are shown in rye and wheat, when compared with prices a year ago.

J. J. Blommer, traffic secretary of the Association of Commerce at Milwaukee, aroused considerable comment by a spirited attack on the officials of the Chicago, Milwaukee & St. Paul Railroad for closing down their big car shops at Milwaukee for several days for the Thanksgiving holiday. Mr. Blommer makes the point that when the car shortage is very great and when thousands of cars on the St. Paul railroad are in bad order, that it is showing a very poor spirit of service on the part of the road to close the car repair shops for several days on the pretext of a holiday.

Mr. Blommer asserted that in Milwaukee alone, at the terminal and at the repair track stations, there were almost 1,000 freight cars which needed to be fixed. Mr. Blommer directed his attack against President H. E. Byram of the Chicago, Milwaukee & St. Paul Railroad, but so far as known the holiday shop schedule was carried out by railroad officials as first planned and announced.

E. W. Felder of Superior, Wis., has been appointed a member of the Grain and Warehouse Commission for Wisconsin by Gov. Blaine to succeed James Kernan who died recently. Mr. Felder will serve for the term ending on the first Monday in February, 1924.

The traffic of the Chicago, Milwaukee & St. Paul Railroad is breaking all records according to reports sent here by President Byram. President Byram also expects that the remainder of the year 1922 and the early months of 1923 will set additional high traffic records. There is an extraordinary demand for cars of all kinds, Mr. Byram stated and he added that the company had fallen far short of furnishing all the cars that were really needed to take care of the huge traffic. The grain movement has been exceptionally heavy, Mr. Byram asserted, and even now only 35 per cent of the grain in Montana and part of South Dakota have been moved.

Reports by Milwaukee grain men show that exceptionally large amounts of grain are still left in the rural districts and that country elevators are loaded with grain for the most part and that there is every disposition to sell this grain as soon as the necessary cars can be obtained to make the shipments to primary centers.

Grain shipments on the Great Lakes were reduced from 32,000,000 tons to 16,000,000 tons, the effect of the rail strike according to W. J. Fitzgerald, shipping agent. Shipping will continue in spite of the official closing of navigation as long as insurance can be obtained at rates which will warrant running. Mr. Fitzgerald also reported that several new ships are under construction for next year's service and a profitable business is predicted for the year 1923.

Charles McMullen, grain inspector for the Milwaukee Chamber of Commerce, recently married Miss Marion Lee of 427 Cambridge avenue, a high school music teacher. The marriage took place at Waukegan, Ill.

Among the new concerns connected with the grain trade at Milwaukee are the Hales Milling Company, Box 789, Milwaukee, Wis., which has been organized with a capital of \$31,000. Malting, milling and manufacturing are the functions of the new company, organized by DeWitt V. Hales, J. L. Neacy, Joseph M. Moore, and Frank J. Szama.

Max P. Borchert an old member of the Chamber of Commerce, who joined the organization in 1909, is dead.

The Milwaukee Chamber of Commerce has sent to Madison the two silver cups for the best grain to be awarded at the Madison Annual Grain Show in January. For 13 years the Milwaukee Chamber

has provided five silver cups to be given for the best exhibits of wheat, corn, oats, barley and rye. Under the rules the cups must be earned three times by the same party before they become the permanent possession of the exhibitors. The cup for the best Silver King corn went to John Bendel, Jr. of Stoddard and the cup for the best bundle of pedigree barley went to Henry Baumgartner & Sons of Wrightstown. These two cups have now been replaced.

Two feed mills have been destroyed by fire in Portage County, Wisconsin, within a period of 36 hours. A feed mill at Almond owned by Oscar Culver was destroyed with a loss of \$12,000. A day before the \$5,000 feed mill at Rosholt owned by M. C. Conrud was razed by fire. Both fires were started by the back firing of gasoline engines.

What is claimed to be the largest car of hay ever unloaded at Milwaukee, according to Fred Kiebler, weighmaster of the Chicago & Northwestern Railway, was recently shipped to Kneisler Bros., hay dealers in the Chamber of Commerce Building. The car contained 46,840 pounds of hay or 23 tons and 840 pounds over. The car contained 20,680 pounds of Timothy hay which sold for \$17 a ton, and 26,160 pounds of Clover which was sold at \$16 a ton. The hay was shipped from Oshkosh, Wis.

The strenuous campaign put forth by the Milwaukee Chamber of Commerce to get the Interstate Commerce Commission to embargo Canadian grain shipments through the United States, has failed. The petition asked that until the congestion at lower lake ports is removed, the embargo be laid. The following reply to the Milwaukee Chamber was received from the Interstate Commerce Commission: "After consideration, the commission does not feel warranted in entering an order to embargo grain from Canada simply because it is Canadian."

Apropos of the waning demand for feed for horses in Milwaukee the Chamber of Commerce obtained figures showing that the horse population of the city is rapidly being displaced by the auto. The number of horses assessed by the city was 3,670 in 1920, 3,071 in 1921 and 2,711 in 1922. The number of horses was reduced about one-third in three years.

The Charles A. Krause Milling Company is increasing the size of its storage warehouse by a building 80 by 140 feet in size, costing about \$25,000.

William George Bruce, head of the Milwaukee Harbor Commission, who is instrumental in carrying out Milwaukee's plans for a large harbor to promote commerce, has just made a statement that the commerce of the Great Lakes is still in its infancy. He declared that there will be co-ordination of lake and rail facilities at Milwaukee and that with the new harbor now being built, this city will get more and more business in grain as well as in other lines.

The fact was pointed out that the Great Lakes commerce is far more important for the United States than the entire cargo movement on the Atlantic between America and European ports. He stated that the Great Lakes traffic is about 200,000,000 tons a year as compared with some 65,000,000 tons for the Atlantic as indicated above.

The tremendous commerce on the Great Lakes he said is carried on with harbors which have received only about \$25,000,000 for improvements while Atlantic ports have received \$250,000,000 from the Federal government.

Mr. Bruce pointed out that most of the Great Lakes ports have a peculiar situation as to terminals. The most desirable water fronts are usually privately owned and are devoted to commercial or industrial pursuits that have nothing to do with water transportation, or these water fronts are occupied by railroads which are antagonistic to water-borne commerce. He pointed out that river fronts are no longer used as terminals because the land is too valuable for other purposes. To obviate this the water fronts abutting on the lake must be used for shipping, he stated. Realizing this, he added, Milwaukee had acquired the Jones Island peninsula and this outer lake front will be equipped with grain elevators, transit sheds, warehouses, car ferry slips and rail connections to make it ideal for handling trade.

A special investigation of the shipping business from the port of Milwaukee will be conducted by Lynn Halvorsen and George E. Wood assistant in the geography department at Georgetown University in connection with the Milwaukee Harbor Board. The data collected will be used by the Harbor Commission.

Keen interest is taken at Milwaukee in the new rye grades proposed as this is one of the largest rye markets in the United States. Note is made especially of the point that the grades are not established officially at this time because the Department of Agriculture has not the necessary funds to carry the plan into effect, but it is believed that the new grades will be quite generally adopted by

grain inspection departments on a voluntary basis. There is considerable dissatisfaction now over the fact that rye grades are not uniform and the feeling is that there will be great worth in standard grades.

* * *

The tremendous congestion of grain at Buffalo in the last few weeks of the shipping season and the efforts of the Milwaukee Chamber of Commerce to get an embargo on Canadian grain shipped through eastern United States, gave a tremendous boom to the St. Lawrence Deep Waterway in this district. Grain men now realize more clearly than ever that a direct outlet to the Atlantic by means of the St. Lawrence is the only real solution of the problem of shipping grain to the eastern seaboard.

* * *

Frank A. Prei and Earl L. Patterson of the Bush Grain Company have been elected to membership in the Milwaukee Chamber of Commerce. The memberships of E. G. Hadden, additional, and Gene H. Redford have been transferred.

* * *

Extensive improvements are being made to the plant of the Froedtert Grain & Malting Company. These improvements are expected to make the plant one of the finest malting concerns in the country. The changes include new boiler equipment, a car capacity shipping hopper scale, additional trackage facilities giving two loading and one unloading tracks, also increased receiving and shipping capacities. To add to the fine appearance of the plant, the grounds will be carefully parked in the most approved manner.

* * *

The late corrected returns on the corn yield of Wisconsin show that the crop is close to the extremely high level of 1921. The average yield of corn per acre for 1922 is estimated at 43.5 bushels and the corn cut for silage about 7.8 tons. The estimated yield of buckwheat for the state is 14.1 bushels per acre with a total production almost up to the high point of 1921.

* * *

The extent of the development of the silo in Wisconsin is shown by the fact that about 36 per cent of the corn acreage now goes into the 90,000 silos of the state.

ST. LOUIS

S. F. LARRIMORE CORRESPONDENT

STOCKS of grain the St. Louis public elevators on November 29, 1922 were as follows: Wheat 1,136,039 bushels; corn, 372,597 bushels; oats, 223,237 bushels; rye, 6,594 bushels and barley, 3,616 bushels. Stocks in private elevators on the same date were as follows: Wheat, 174,279 bushels; corn, 29,912 bushels; oats, 13,561 bushels; and rye, 1,428 bushels. Stocks of flour in St. Louis on December 1, 1922 were 60,900 barrels; on November 1, 1922, 52,200 barrels and on December 1, 1921, 84,470 barrels.

* * *

The Donohoe Grain Elevator at Pearl, Ill., burned on November 29 entailing a loss of \$20,000. Insurance to the amount of \$13,000 was carried.

* * *

The farmers elevator at Gilmore, Mo., was destroyed by fire of unknown origin recently. The loss of \$12,000 was partly covered by insurance.

* * *

C. M. Pease, former president of the Southwest Millers Association, died at his home in West Plains, Mo., recently. He was also president and manager of Pease Moore Milling Company of that city. He was the first president of the West Plains Chamber of Commerce and one of the community's most active citizens.

* * *

The Boone County Milling Elevator Company of Columbia, Mo., has entered into a contract with the Monolith Builders of Kansas City for the immediate construction of an elevator and warehouse near the Wabash Depot. It will have a capacity of 60,000 bushels and will cost about \$50,000. The new equipment will give this company an elevator capacity of some 160,000 bushels.

* * *

Eugene Dreyer, of the Dreyer Commission Company, St. Louis, attended the Feed Control Official Association meeting at Washington, D. C., recently. He represented the Merchants' Exchange, Grain Dealers Association and the U. S. Feed Distributors. Geo. W. Ziebold, Jr., of Waterloo, Ill., of the Southern Illinois Millers also attended the meeting.

* * *

Resumption of normal schedules by the Mississippi-Warrior Service (the Federal barge line) was begun by the arrival at Cairo recently of the towboat *St. Louis* and four barges, 12 days after it left New Orleans. This means a running time of 14 days to St. Louis, while the average time to St. Louis from New Orleans is 17½ days. Conditions between St. Louis and Cairo, a stretch of the river where considerable trouble was

experienced in the extremely low water of October are said to be now practically normal, and the service is receiving the prompt aid of the United States Engineers' Bureau, of which Major Langsford E. Oliver was recently appointed as officer in charge, with headquarters in St. Louis.

* * *

The Agricultural Seed Company of St. Louis has leased from the Veersteeg Realty Company the five store building at Biddle and Collins streets. The seed company does a wholesale seed and feed business.

* * *

C. H. Corbitt, representative of the Missouri Valley Sack Company, in the St. Louis trade territory has been confined to his bed for some weeks suffering from bronchial pneumonia. His condition is improving, however, and he should be out by the time this reaches the reader.

* * *

George F. Powell and Marshall Hall, both of the St. Louis Merchants' Exchange, have been appointed delegates to represent the Exchange at the National Rivers and Harbors Congress held in Washington on December 6 and 7.

* * *

P. S. Wilson, sales manager for the Valier & Spies Milling Company, of St. Louis, has returned from a three-week trip in the South and Southwest, visiting branch houses and calling on connections. Mr. Wilson also represented the millers at the meeting of feed control officials in Washington, at which official feed standards were discussed and a uniform feed label adopted.

* * *

The Executive Committee of the Missouri State Farmers' Association, which met in St. Louis recently, has under consideration a proposal to ask the Government to establish a price-fixing commission for farm products. The plan has been outlined by William Hirth, editor of the *Missouri Farmer*, official organ of the Association, which is published at Columbia, Mo.

Mr. Hirth proposes the following plan for a solution of the farmer's problems: "Organization of a price-fixing commission which will establish prices of farm produce on a scale commensurate with the returns given union labor and the tariff-protected manufacturer. Control of the annual crop surplus by the Government and the fixing of a tariff sufficiently high to protect the home-consumed produce. Sale of the annual crop surplus through Government-regulated channels at prices established by the world market."

The plan would work in this way, according to the explanation given: If the price for domestic wheat was fixed at \$2 a bushel by the commission, a tariff would be placed on imported wheat so that none could be bought at a lower price. The surplus would be sold abroad by the Government, the difference between the price obtained and the secured price to be borne by the Government. The Missouri State Farmers' Association has 70,000 members and is affiliated with numerous other similar organizations. It is proposed to use united pressure on Congress with the "farm bloc" as leverage.

* * *

Quarantine against wheat grown in Madison, St. Clair, Monroe and Jersey Counties, Illinois, is being considered on account of the refusal of farmers whose farms have become impregnated by infected grain, to co-operate with the authorities in stamping out the pest. The quarantine would prohibit the shipment of wheat.

* * *

The following recently made application for membership in the St. Louis Merchants' Exchange: John L. Boland of the U. S. Grain Growers Sales Company, of St. Louis; Charles A. Johnson of C. A. Johnson & Co., Chicago; and Harry G. Gaus of Henry Gaus & Sons Manufacturing Company, St. Louis.

* * *

C. S. Moffitt, pioneer member of the St. Louis Merchants' Exchange, will go to California soon to reside there permanently. He was the honor guest at a dinner at the Hotel Chase recently and resolutions of regret have been passed by the Exchange as well as the St. Louis Grain Club. Mr. Moffitt has been a member of the 'Change for 45 years, an officer of the Tuscan Lodge for 24 years and has taken an active part in church affairs.

* * *

James W. Garneau, member and former president of the St. Louis Merchants' Exchange, died at his home here on November 24. A committee was appointed by the Board of Directors to draft resolutions of regret and to have them engrossed and sent to the bereaved family. Mr. Garneau had been an active member of the Exchange and also was interested in a number of other industries in and around St. Louis.

* * *

The following visitors were on the floor of the St. Louis Merchants' Exchange recently: Frank Forster, of the Globe Milling & Grain Company, Ogden, Utah; William Clask, Glasgow, Scotland; J. S. Sheets, Cleveland, Ohio; H. J. Rankin, Chicago, Ill.; W. H. Ostenberg of Omaha, Neb., and many others.

* * *

Charles Rippin, Traffic Commissioner of the Merchants' Exchange of St. Louis, was elected president of the National Industrial Traffic League at its annual convention held in New York City on November 15 and 16. This is an organization of over 1,000 principal shipping interests of the country. It looks after

the interests of the shippers in general in connection with transportation matters, and also deals with matters of legislation arising which may affect transportation. Mr. Rippin was educated in the public grammar high schools of St. Louis and has lived here all his life. He entered the railroad business as a boy and remained in that service over 20 years. He was clerk in the general freight office of the Mobile and Ohio, Commercial Agent for the Seaboard Air Line and General Agent for the Missouri Pacific-Iron Mountain. While in the latter position he was called by the Merchants' Exchange in 1912 to become its Traffic Commissioner. Since that time he has handled all transportation matters for the Exchange, including many cases before the Interstate Commerce Commission and the various State Commissions. He represented the Exchange in a number of conferences between the Mississippi Valley people and the U. S. Shipping Board, which resulted in the establishment of the barge line on the Mississippi River.

He has been first vice-president of the National Industrial League for two years and before that was Chairman of its Demurrage Committee. When the original U. S. Shipping Board Bill was before Congress he was one of three appointed by the National Industrial Traffic League to study the question and recommend action. The Committee recommended establishment of the Shipping Board with power of putting American shipping on equal footing with British and other foreign shipping. The League expresses itself on all important questions arising in connection with transportation matters and is on record in favor of the Ship Subsidy bill which is a logical development arising from the original establishment of the Shipping Board. The headquarters of the League are in Chicago where the secretary, assistant secretary and complete office staff handle the routing work. The presidency being an honorary position, Mr. Rippin will continue to serve the Merchants' Exchange as Traffic Commissioner.

GRAIN NEWS FROM BOSTON

BY L. C. BREED

It is stated that Massachusetts expends upwards of \$10,000,000 annually for hay which is received from outside the state.

* * *

On November 22, the members of the Chamber, handling grain and feedstuffs as brokers, held a meeting to consider, whether or not, the brokerage rates should be reduced. After a discussion of the matter, by a two-thirds vote, it was decided that no change should be made at present.

* * *

Early in the month, an informal reception by the members at which President Fred S. Snyder presided, was given to Charles M. Schwab in the reading room, on which occasion, in response to an urgent request, he made a brief address in a familiar and happy way which dealt with the general business situation. As is well known, Mr. Schwab is a confirmed optimist in the future of the country.

* * *

An event of more than local interest and importance was the recent drydocking at South Boston, of the White Star liner *Majestic*, the largest steamship in the world. The drydock at South Boston is the only one in this country or Great Britain large enough to accommodate the 965-foot, 56,000-ton vessel which came here from New York to have her hull cleaned and painted. Though the *Majestic* was drawing 37 feet of water, leaving less than six feet between her keel and the sill of the dock, the docking was successfully accomplished.

* * *

Continued improvement in the business of the Port of Boston is indicated by the statistics for the month of October, during which there arrived 144 steamers from foreign countries and 12 vessels. Among the recent shipments of grain were 180,000 bushels of wheat and corn to Liverpool, 80,000 bushels wheat to London, 264,000 bushels wheat to Marseilles, and 208,000 bushels wheat to Liverpool. Several steamers are now here loading grain cargoes.

* * *

The Great Northern Steamship Company, Boston, was recently incorporated with a capital stock of \$500,000. The incorporators were Robert E. Tucker, Ernest W. Tucker, Perley A. Hale and others.

NEWS FROM NORTHERN OHIO

BY T. J. CUNNINGHAM

Frank Bacon, of the Pioneer Mills, Tiffin, has been making the rounds of his friends and presenting them with a generous sample of his new buckwheat flour. This is an annual custom of Frank's, who maintains that buckwheat flour is a wonderful rejuvenator a sure cure for nervous debility, etc.

* * *

According to George U. Marvin, head of the Ohio division of markets, Ohio farmers have now learned the ways of trade and are business men. In speaking of the amount of corn available for sale he says: "This year the situation has changed. Experience has proved the teacher. There is as much corn in bin and field, as at the same time in 1921. The de-

mand has not fallen away. But the farmers are not offering their grain for sale in as free and open a way. Their financial condition is better, the banks do not hold as much of their paper, and they have an added feeling of freedom."

C. F. Shackson and I. P. Blauser, representatives from the Ohio State University, have been making a complete survey of Seneca County in an effort to stamp out the common barberry, the cause of black rust, which has been creating havoc in the wheat fields here.

The introduction of certified Trumbull seed wheat last fall resulted in a greatly increased yield in Sandusky County.

Dallas Sullivan, manager of the Richwood Grain Company, Richwood, Ohio, was elected state representative on the Republican ticket by a big majority.

The Haskins Grain Company, Haskins, Ohio, operating two grain elevators, has had both of them filled with grain which they were unable to ship owing to shortage of grain cars on B. & O.

In the vicinity of Luckey, farmers were making hay in the latter part of November, something never done before in that locality.

The Mennel Milling Company has been shipping over 100 cars of flour, grain and feed per week from its Fostoria plant.

Farmers are being advised by the Department of Farm Management, Ohio Experiment Station, to feed Clover hay on the farm rather than market it at present low prices.

When the Farmers' Exchange Elevator, at Luckey, Ohio, received a car of coal recently, H. W. Myers, employe, and H. E. Rolfes, drayman, were routed out at 5:30 in the morning as teams from several nearby towns were waiting to get a supply. The car was soon emptied.

Representatives of Seneca County co-operative elevators and the Seneca County farm bureau were in attendance at a meeting November 23, called for the purpose of having explained the proposed state grain sales plan. A. E. Anderson, representing Ohio Farm Bureau Federation, outlined the plan. The plan now up for approval is a cash sales agency taking full responsibility in sales transactions. This company will handle the grain for local farmers' elevators and associations of farmers having grain to sell on a commission basis. Capital stock to amount of \$25,000 is recommended, with shares at par value of \$100 each. It will be a stock company with co-operative provisions, limiting to one vote and ownerships of five shares. A reserve fund is to be set aside from earnings for payment of not to exceed 6 per cent on capital stock, the balance to be prorated to stockholders on a patronage basis. The main office will be located in Columbus. An expert grain man is to be hired as manager. Bids will be received from exporters, millers and buyers of grain, and on that basis bids will be made to local elevators. The following co-operative elevators were represented at the meeting: Fostoria, Bascom, Tiffin, Maple Grove, Berwick, Republic, Old Fort and Green Springs.

During one hour, on the morning of November 22, 240 cars of coal, bound for Sandusky and lake boats, passed through Marion, Ohio, on the Pennsylvania. During this hour more than 12,000 tons of coal were moved.

Stock and crop protection were urged by the Ohio Fair Circuit at its meeting November 21, in Canton. Resolutions appealing to the legislature for help in wiping out the corn borer were adopted.

A new metal boot is to be installed and other minor repairs made to the Ash & Ash elevator at Ilcr, Ohio, operated by The Sneath-Cunningham Company.

The Fostoria Milling Company has been sold to J. E. Babbett, Cleveland, Ohio, who will immediately reorganize it. The consideration was not mentioned. This is a farmers' organization which has been on the rocks for some time, and strenuous efforts have been made to reorganize it.

C. O. Toppin, former owner of the Mt. Blanchard Elevator, is making a success in the chicken hatchery business. He has recently enlarged his buildings so as to conduct his business on a large scale.

The co-operative grain sales agency seems to be making headway. Three meetings of elevator directors and managers already have been held in as many counties with about 15 elevators represented, according to a statement from the Farm Bureau. It is said the response has been favorable to the association of the elevators into a state-wide exchange through which they can sell grain in large quantities on a co-operative basis. The meetings, during the last two weeks, were held in Wood, Seneca and Marion Counties. Those planned for

the coming month will be held in counties of the heaviest grain producing sections of Ohio. The plan proposed calls for a cash sales agency, which will receive bids from anyone interested in buying grain. It is held that better bids may be obtained for larger quantities of grain than an individual farmers' elevator is able to secure. The bids will be relayed from a central office,—probably Columbus,—to the various elevators associated with the state agency. There are about 300 farmer-owned elevators in the state at present. The plan proposed is similar to that used by Michigan farmers, where there now are 107 elevators working through a selling agency.

According to T. H. Parks of Ohio State University, farmers who observed safe-sowing dates this Fall will not be bothered with Hessian fly next year. Prof. Parks has just returned from a tour of six counties where he made careful counts of wheat sown at various dates last fall. His findings show that the safe dates announced for the various regions were wisely chosen. In Defiance County, wheat sown September 20 he found now 46 per cent infested, whereas fields sown on or after September 25, are less than 4 per cent infested. In Sandusky County, sowings made September 15 are now 76 per cent infested, while sowings made on or after September 27, are virtually free of the insect. These relative differences were found to be about the same in the other counties visited.

The month of November here was above normal in warmth and below normal in rainfall, according to a report for the month prepared by Prof. T. H. Sonnedeker, government weather observer here. The average temperature was 44.1 degrees; highest 70.0; lowest (25th) 20.0. Total precipitation 1.24 inches. Snowfall, trace. Rain fell on 13 days of month.

The wheat fields in this locality are all in a good, healthy condition. The long, dry spell was relieved by copious rains during the last couple of weeks, but the showers were usually succeeded by cold weather or

snow. The plants do not appear to have increased in height to any extent, and for the most part are still quite short. Think the crop is in good shape to go through the winter. The acreage here is fully equal to that of last year. Farmers who still have wheat to sell,—and there are a great many of them,—are not disposed to let go at present prices. Everywhere they are sitting very tight. Unless there is a noticeable break from present levels, think very little wheat will be sold.

New corn is moving to elevators very slowly here, in spite of the fact that there is a good crop and of very good quality. Farmers are all looking for higher prices, and only those who are forced to do so are selling. Considerable corn is changing hands amongst the farmers themselves at prices higher than the dealers can afford to pay. This condition results from the fact that quite a number of farmers failed to get their corn planted early and did not get a crop. More shredders have been used this fall in this territory than ever before. As much of this work has been carelessly done and the corn only partly husked, it may result in considerable corn spoiling.

Movement of oats continues very light, and can't be otherwise until a new crop is grown here, as very few oats remain in this territory. The weather has been favorable for plowing, and a great deal of this has been done lately, indicating a desire on the part of the farmers to get out a big oats acreage early.

The car situation has not eased up any in this locality, and it is fortunate in this respect that so little grain is moving to elevators.

Farmers are still bringing in Clover seed in small bags, but the big lots are all pretty well cleaned up here. The seed, generally, is of good quality. Very little Timothy seed is being sold and there is not much back to come in.

TRANSPORTATION

RECORD MOVEMENT OF GRAIN

Grain traffic, according to a compilation of the car service division of the American Railway Association, amounted to 2,161,522 cars during the period from January 1 to November 18, last. This marks a new high mark for the movement of grain and products in the history of the railroads and is an increase of 112,583 cars, or 5½ per cent, over the same period last year. Compared with 1920, however, grain loadings showed an increase of 513,059 cars, or 31 per cent.

RAILROAD MOTIVE POWER

Locomotives in need of repair on November 15 totalled 18,356, or 28.5 per cent of the number on line, according to reports filed with the car service division of the American Railway Association. This was a decrease of 10 locomotives compared with the number on November 1.

Locomotives in need of heavy repairs totalled 15,120, an increase within 15 days of 19, while those in need of light repairs amounted to 3,236, which was a decrease of 29 within the same period.

From November 1 to November 15, the railroads turned out of their shops 12,139 locomotives. The number of serviceable locomotives on American railroads totalled 46,101 compared with 46,096 on November 1.

NO EXTENTION ON BILL OF LADING FORMS

Consideration has recently been given by the Railroad Bill of Lading Committee—eastern group—to the requests for extension beyond December 31, 1922, of the present time limit for acceptance of old forms of domestic bills of lading with stamped notation. R. N. Collyer, chairman of the Committee, says:

"It being felt that the extensions already made have afforded shippers ample opportunity to secure supplies of the forms as prescribed by the Interstate Commerce Commission and published in the Consolidated Classification to take effect March 15, 1922, and to use up any supply of old forms purchased before January 1, 1922, when the forms prescribed by the Interstate Commerce Commission were before the public, it was concluded to recommend to eastern carriers that no further extension in the period for the use of the old forms be made."

COAL CAR SERVICE RETURNS TO NORMAL

The Commission, December 8, issued amendment 4 to Service Order 25 and amendment 2 to Service Order 24, vacating and setting aside those service orders at midnight, December 11. The effect of this action is to remove all restrictions on the use of open-top cars east of the Mississippi and to cancel

the priority in movement heretofore accorded specified commodities, both east and west of the Mississippi, when the carriers are currently unable promptly to transport all traffic offered them.

Service Order 22 is the only general service order still outstanding. This order directs all common carriers to forward traffic to destination by the routes most available to expedite its movement and relieve congestion, without regard to routing made by shippers or by carriers from whom the traffic is received, or to the ownership of cars, with appropriate provision for the protection of the rate over the route designated.

RAIL MILEAGE IN AMERICA

How the railway mileage of the United States compares with that of some of the other countries of the world can best be indicated by means of multiples showing how many times the mileage of the United States is more than that of the other countries. These countries are the 10 which stand next to the United States in point of mileage:

	Railway mileage.	Times
United States	264,373	...
Russia (including Asiatic).....	51,646	5.1
Canada	38,888	6.8
British East Indies	26,325	7.3
Germany	36,131	7.3
France	35,145	7.5
United Kingdom	24,396	10.8
Argentina	23,156	11.4
Brazil	17,478	15.1
Mexico	15,841	16.7
Italy	12,501	21.1

In other words, the railway mileage of the United States is five times as great as the mileage of Russia, which contains the next largest system of railways. Our mileage is nearly seven times that of Canada, more than seven times that of Germany or France, nearly eleven times that of the United Kingdom and twenty-one times that of Italy.

FREIGHT LOADINGS

The expected seasonal decline in revenue freight loading has set in, the total number of cars loaded in the week ended November 25 having been 955,495 as compared with 969,094 in the preceding week according to the weekly report of the car service division of the American Railway Association. The total exceeded the loading for the corresponding weeks of 1921 and 1920 of 673,465 and 803,701 cars, respectively. Those weeks, however, reflected depression in loading caused by observance of Thanksgiving Day, which fell within them in those years.

The total loadings for the country in the week ending November 25 and the loadings of the corres-

December 15, 1922

ponding week a year ago, are as follows: Grain and grain products, 54,790 and 35,159; livestock, 40,217 and 25,771; coal, 202,032 and 138,020; coke, 13,384 and 6,356; forest products, 66,046 and 43,791; ore, 15,052 and 5,718; merchandise, L. C. L., 228,771 and 200,824; miscellaneous, 335,353 and 217,826; total, 1922, 955,495; 1921, 673,465; 1920, 803,701.

CAR SURPLUS AND SHORTAGE

The average daily shortage of freight cars in the period November 15-23 was 152,565, a decrease of 5,671 as compared with the shortage in the preceding period, according to the summary issued by the car service division of the American Railway Association. The average daily surplus increased to 5,306 cars, the figure for the preceding period having been 4,945 cars.

The shortage was made up as follows: Box, 77,123; ventilated box, 105; auto and furniture, 1,809; total box, 79,037; flat, 7,424; gondola, 24,616; hopper, 19,067; all coal, 43,683; coke, 300; S. D. stock, 13,826; D. D. Stock, 221; refrigerator, 7,616; miscellaneous, 458; total, 152,565.

The surplus was made up as follows: Box, 565; ventilated box, 6; auto and furniture, 9; total box, 580; flat, 532; gondola, 754; hopper, 1,520; all coal, 2,274; S. D. stock, 224; refrigerator, 99; tank, 236; miscellaneous, 1,361; total, 5,306.

RECEIPTS AND SHIPMENTS

Following are the receipts and shipments of grain, etc., at the leading terminal markets in the United States for November:

BALTIMORE—Reported by Jas. B. Hessong, secretary of the Chamber of Commerce:

Receipts		Shipments	
1922	1921	1922	1921
Wheat, bus..	3,053,238	1,340,580	2,400,365
Corn, bus....	2,512,419	687,135	1,295,712
Oats, bus....	335,421	18,623	584,024
Barley, bus..	114,176	33,742	113,310
Rye, bus....	2,641,354	790,341	1,326,946
Buckwheat, bus.	7,475	1,232	.....
Hay, tons....	1,220	996	.....
Flour, bbls..	160,501	108,579	71,438

CAIRO—Reported by M. C. Culp, chief grain inspector and weighmaster of the Board of Trade:

Receipts		Shipments	
1922	1921	1922	1921
Wheat, bus..	2,298	19,850	73,370
Corn, bus....	53,288	566,516	36,311
Oats, bus....	1,504,440	564,418	1,300,396

CHICAGO—Reported by John R. Mauff, secretary of the Board of Trade:

Receipts		Shipments	
1922	1921	1922	1921
Wheat, bus..	2,978,000	1,157,000	2,393,000
Corn, bus....	10,380,000	7,577,000	6,205,000
Oats, bus....	8,200,000	3,552,000	7,292,000
Barley, bus..	949,000	522,000	373,000
Rye, bus....	1,392,000	504,000	708,000
Timothy Seed, lbs.	2,048,000	3,198,000	3,943,000
Clover Seed, lbs.	1,479,000	2,040,000	1,187,000
Other Grass Seed, lbs..	2,571,000	2,719,000	1,004,000
Flax Seed, bus.	131,000	57,000	.....
Hay, tons....	12,791	13,274	392
Flour, bbls..	1,738,000	941,000	1,341,000

CINCINNATI—Reported by D. J. Schuh, executive-secretary of the Cincinnati Grain & Hay Exchange:

Receipts		Shipments	
1922	1921	1922	1921
Wheat, bus..	230,000	156,000	236,400
Shelled Corn, bus.	464,400	402,000	306,000
Ear Corn, bus.	17,600	14,400	.....
Oats, bus....	262,000	242,000	110,000
Barley, bus..	2,600	5,200	.....
Rye, bus....	84,000	84,000	2,400
Hay, tons....	3,844	6,160	.....
Feed, tons..	1,320	450	.....

DULUTH—Reported by Chas. F. MacDonald, secretary of the Board of Trade:

Receipts		Shipments	
1922	1921	1922	1921
Wheat, bus..	7,588,623	5,313,992	8,482,870
Corn, bus....	15,677	372,696	597,362
Oats, bus....	63,514	229,399	279,814
Barley, bus..	447,271	184,132	1,188,476
Rye, bus....	3,905,286	850,840	4,910,535
Flax Seed, bus.	912,035	867,483	1,007,442
Flour, bbls..	324,620	1,189,480	761,125

FORT WILLIAM, ONT.—Reported by E. A. Ursell, statistician of the Board of Grain Commissioners:

Receipts		Shipments	
1922	1921	1922	1921
Wheat, bus..	56,846,578	40,848,143	71,734,003
Corn, bus....	3,367	190,756	3,367
Oats, bus....	4,802,513	4,727,224	4,433,156
Barley, bus..	2,092,941	1,100,064	3,433,112
Rye, bus....	1,766,134	620,827	2,392,888
Flax Seed, bus.	1,021,677	669,949	1,050,483
Mixed Grain, lbs.	8,934,165	2,963,150	5,655,552

KANSAS CITY—Reported by E. D. Bigelow, secretary of the Board of Trade:

Receipts		Shipments	
1922	1921	1922	1921
Wheat, bus..	6,543,450	4,359,150	4,463,100
Corn, bus....	902,500	451,250	338,750
Oats, bus....	1,485,800	314,500	457,500
Barley, bus..	49,500	67,500	10,400
Rye, bus....	55,000	22,000	14,300
Kaffir Corn, bus.	168,300	262,900	105,000
Hay, tons....	29,916	13,452	6,492
Flour, bbls..	81,575	61,750	549,900

CLEVELAND—Reported by F. H. Baer, traffic commissioner of the Chamber of Commerce:

Receipts		Shipments	
1922	1921	1922	1921
Wheat, bus.—			
Lake	102,040	.....	.....
R. R.	66,540	63,335	1,638
Corn, bus.—			
Lake	154,720	146,594	9,523
R. R.	123,644	146,594	85,540
Oats, bus.—			
Lake	181,681	194,160	15,318
R. R. ....	.....	.....	69,568
Barley, bus.—			
Lake .....	.....	.....	.....
R. R.	3,009	2,025	.....
Rye, bus.—			
Lake .....	.....	.....	.....
R. R.	2,869	3,261	.....
Hay, tons—			
Lake .....	.....	2,775	50
R. R.	1,898	.....	24

INDIANAPOLIS—Reported by Wm. H. Howard, secretary of the Board of Trade:

Receipts		Shipments	
1922	1921	1922	1921
Wheat, bus..	450,000	126,100	192,000
Corn, bus....	2,479,000	2,076,200	1,832,000
Oats, bus....	818,000	856,000	622,000
Rye, bus....	67,000	15,400	47,000
Flour, bbls., mfg.	44,810	31,017	.....

MILWAUKEE—Reported by H. A. Plumb, secretary of the Chamber of Commerce:

Receipts		Shipments	
1922	1921	1922	1921
Wheat, bus..	445,200	105,300	295,758
Corn, bus....	738,500	762,475	586,925
Oats, bus....	2,140,375	1,410,850	1,749,270
Barley, bus..	867,000	446,505	303,230
Rye, bus....	406,105	69,500	375,820
Timothy Seed, lbs.	569,227	918,241	324,768
Clover Seed, lbs.	586,985	328,507	892,552
Malt, bus....	15,200	70,300	444,600
Flax Seed, bus.	54,340	19,320	41,045
Feed, tons...	6,090	7,632	23,637
Hay, tons....	1,454	1,176	1,128
Flour, bbls..	431,300	168,560	941,486

MINNEAPOLIS—Reported by G. W. Maschke, statistician of the Chamber of Commerce:

Receipts		Shipments	
1922	1921	1922	1921
Wheat, bus..	14,135,300	8,655,760	5,148,040
Corn, bus....	512,090	871,990	258,810
Oats, bus....	2,324,830	1,925,030	2,837,100
Barley, bus..	1,389,320	716,310	1,131,910
Rye, bus....	1,216,070	253,310	977,530
Flax Seed, bus.	598,980	381,790	186,010
Hay, tons....	2,089	1,693	228
Flour, bbls..	125,975	133,433	2,040,362

NEW ORLEANS—Reported by G. S. Colby, chief grain inspector and weighmaster of the Board of Trade, Ltd.:

Receipts		Shipments	
1922	1921	1922	1921
Wheat, bus..	3,008,643
Corn, bus....	2,178,447
Oats, bus....	41,800
Barley, bus..
Rye, bus....	152,142

NEW YORK CITY—Reported by H. Heinzer, statistician of the Produce Exchange:

Receipts		Shipments	
1922	1921	1922	1921
Wheat, bus..	12,644,800	.....	9,547,000
Corn, bus....	1,324,000	.....	1,660,000
Oats, bus....	2,575,000	.....	1,317,000
Barley, bus..	642,200	.....	617,000
Rye, bus....	1,935,800	.....	1,856,000
Timothy Seed, lbs. ....	.....	.....	2,942
Clover Seed, bags	2,362	.....	11,995
Flax Seed, bus.	521,200	.....	.....
Hay, bales ..	11,234	.....	7,293
Flour, bbls..	1,294,549	.....	937,000

OMAHA—Reported by F. P. Manchester, secretary of the Omaha Grain Exchange:

Receipts		Shipments	
1922	1921	1922	1921
Wheat, bus..	2,984,800	740,600	1,782,200
Corn, bus....	2,373,000	974,400	956,200
Oats, bus....	1,802,000	384,000	1,270,000
Barley, bus..	137,600	51,200	94,400
Rye, bus....	278,600	86,200	219,800

PORTLAND, ME.—Reported by Howard H. Waldron, traffic manager of the Chamber of Commerce:

Receipts		Shipments	
1922	1921	1922	1921
Wheat, bus..	2,852,339	1,585,704	1,270,700
Corn, bus....	362,160	.....	.....
Oats, bus....	383,382	57,374	198,300
Barley, bus..	42,290	.....	.....
Rye, bus....	16,330	313,420	.....

ST. LOUIS—Reported by Eugene Smith, secretary of the Merchants' Exchange:

Receipts		Shipments	
1922	1921	1922	1921
Wheat, bus..	4,277,518	1,583,005	3,674,970
Corn, bus....	2,189,382	1,816,644	1,519,425
Oats, bus....	2,988,000	1,044,000	2,405,695
Barley, bus..	94,400	67,200	29,710
Rye, bus....	35,265	6,600	35,760
Kaffir Corn, bus.	31,200	56,200	10,040
Hay, tons....	11,625	7,084	4,275
Flour, bbls..	392,610	439,440	637,060

TOLEDO—Reported by A. Gassaway, secretary of the Produce Exchange:

Receipts		Shipments	
1922	1921	1922	1921
Wheat, bus..	1,417,920	1,736,335	403,595
Corn, bus....	375,000	222,500	119,500
Oats, bus....	243,950	135,300	105,940
Barley, bus..	4,800	2,400	.....
Rye, bus....	306,000	75,600	113,800
Timothy Seed, lbs.	1,752	1,150	184
Clover Seed, lbs.	8,373	5,766	2,757
Alsike Seed, lbs.	458	1,050	213

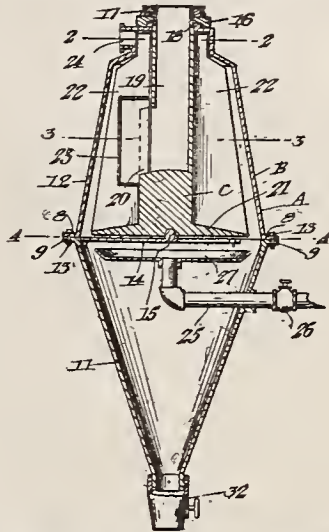
GRAIN TRADE PATENTS

Bearing Date of September 26, 1922

Grain door.—George M. Waddy, Buffalo, N. Y. Filed July 13, 1921. No. 1,429,985.

Grain and seed grader and separator.—Edgar Duncombe Eddy, Ottawa, Ont., Canada. Filed February 13, 1920. No. 1,430,293. See cut.

Claim: An apparatus for grading and cleaning grain and seeds comprising a casing, a rotor rotatably mounted in the casing, peripheral vanes on the rotor,



means for delivering stock to be treated axially of the rotor, means for delivering liquid to the casing, and curvilinear baffle walls eccentrically located between the vanes.

Bearing date of October 17, 1922

Desk or platform for wagon scales.—Joseph J. Magrady, Chicago, Ill. Filed December 12, 1921. No. 1,431,969.

Crushing and grinding mill.—Frederick Wriedt, Alphington, Victoria, Australia, assignor to Milo Machinery Company Proprietary, Ltd., Melbourne Victoria, Australia. Filed June 7, 1922. No. 1,432,046.

Automatic belt tightener.—Allen Clark Stringer, St. Louis, Mo. Filed September 24, 1921. No. 1,432,129.

Alarm for elevator grain bins.—Albert O. Miller, Porter, Minn. Filed October 6, 1920. No. 1,432,078.

Seed drier.—Milton S. Nesbitt, Payette, Idaho. Filed March 10, 1921. No. 1,431,978.

Bearing date of October 24, 1922

Grain door.—Carl H. Licht, Rushmore, Minn. Filed February 4, 1922. No. 1,432,879.

Grain car door.—Henry W. Wolf, Stella, Neb. Filed December 5, 1921. No. 1,433,058.

Bearing date of October 31, 1922

Cottonseed meal cooker.—Orlando Sheppard, Jr., Atlanta, Ga., assignor to Buckeye Iron & Brass Works, Dayton, Ohio, a corporation of Ohio. Filed July 27, 1921. No. 1,433,746.

Grain elevator.—Richard C. Stone, St. Louis, Mo. Filed June 9, 1920. No. 1,433,754. See cut.

Claim: A grain elevator having a vertical elevator leg provided with a grain inlet at its lower end and a grain outlet at its upper end, said elevator leg also



having an air inlet at its lower end and a dust outlet at its upper end, and a wind-actuated ventilator whereby air is drawn into said elevator leg through said air inlet and discharged from said elevator leg through said dust outlet.

Bearing date of November 28, 1922

Grain door.—Frank Jager, Chicago, Ill. Filed January 8, 1920. No. 1,437,313.

Apparatus for turning and cleaning bags.—Arthur E. Schulz, Chicago, Ill. Filed August 31, 1921. No. 1,437,025.

Buffer for automatic weighing machines.—Baltus Boulogne, Soerabaia, Java, Dutch East Indies. Filed August 17, 1921. No. 1,437,128.

COAL

NO COAL MINED IN CUBA

Although 35 concessions for coal mining have been granted in Cuba, no coal is mined there in commercial quantities. Of the 35 grants, 16 are in the Province of Pinar del Rio, eight in Province of Habana, and 11 in the Province of Santa Clara.

COAL MINE EXPLOSIONS

Engineers of the United States Bureau of Mines have for 14 years been investigating the cause of explosions in mines and in that time have collected data on 300 coal mine explosions. A study of those explosions is now being made at the Pittsburgh, Pa., experiment station of the Bureau. The work has advanced to the stage whereby it is possible to point out some of the conditions in mines that may lead to an explosion. When the work has been completed, the results will be made public in a bulletin.

INCREASE IN WORLD COAL PRODUCTION

The *Geological Survey* in a recent report says that notwithstanding the great coal strike in the United States, the world's production of coal the first half of 1922 was 568,600,000 metric tons—or considerably greater than the corresponding period of 1921. Settlement of the strike in this country insures that world output in the second half will be greater.

No other fact indicates more clearly the worldwide industrial depression of the past year and a half. In comparison with the last year before the European war, the present year shows a decrease of 12 per cent and this in spite of the fact that in pre-war years the world consumption of coal was increasing at the rate of 38,000,000 tons a year.

Comparison of the figures for the first half of 1922 with those for the corresponding period of 1921 shows an increase for most of the countries of Europe. The increase was greatest, of course, in the British Isles, where the mines were closed by a strike in April, May and June of last year.

DETECTION OF HEATING IN STORED COAL

The heating of stored coal may be detected by the odor given off from the pile, or by thrusting iron rods into the pile and feeling them by hand, or by a thermometer. Steam should not be confused with smoke, for water vapor coming out of the pile in winter time may produce visible steam when there is no appreciable heating within the pile. Temperature tests with an iron rod should be made if possible; actual temperature determinations can be made with any suitable type of thermometer.

When the temperature of a coal pile rises to 140° F., it should be carefully watched. If it rises rapidly to 150° or 160° steps should be taken at once to move the coal and cool off the heated portion, which must be thoroughly cooled before replacing in storage. Authorities on the subject advise moving the pile to stop heating, rather than to depend on water to cool it off. This is particularly true of bituminous, which usually cokes on heating, forming a shell of tarry material about the hot spot, which prevents the water reaching it.

WASTE OF MONEY AND MEN

The studies already made by the United States Coal Commission all point to the fact that the bituminous coal mining industry is overdeveloped. "Too many soft coal mines and too many miners" describes the situation in plain English. In these coal mines more capital is invested and more miners are employed than are needed to produce the coal the country requires. This condition, of course, involves waste on a country-wide scale.

How great is the present inflation of the industry cannot be stated exactly at this time but unquestionably the inflation is excessive. Estimates of the excess mine capacity range from 30 to fully 60 per cent above the country's normal demand which for the last five years has averaged about 510 million tons a year. Figured on the basis of their actual output for the best week in 1918, the capacity of the soft coal mines was then 685,000,000 tons. Since 1918, unfortunately, the mine capacity has been further enlarged, and another estimate of it can be made from the average daily output last year: 300 days' work at that rate would have resulted in 840,000,000 tons being mined, or fully 60 per cent more than the normal needs of the country. How to deflate the coal industry is one of many problems before President Harding's Coal Commission, and its reports may be expected to present facts bearing on this question. If the pub-

lic can appreciate the strength of the evidence already available on this subject of overdevelopment, refusal to invest in new coal mining ventures under present conditions will be recognized as both good business and good citizenship. It is plain enough that the country needs not more coal mines but more work for the coal mines we already have. One potent reason that coal is cheaper to the consumer is that he is supporting a vast surplus of investment and capacity. The large excess capacity cannot for long lower the price of coal, however, simply because that condition of things is wasteful.

PRECAUTIONS AGAINST SPONTANEOUS COMBUSTION IN COAL

The Bureau of Mines in one of its bulletins offers the following suggestions to prevent spontaneous combustion in stored coal:

Avoid storing fine coal. Store screened nut and lump. Avoid external sources of heat, such as steam pipes, warm flues and boiler settings. Avoid making fresh broken surfaces in handling the coal into storage.

Avoid foreign combustible matter which may itself spontaneously heat, such as oily rags, paper, waste, etc.

Avoid sticks and timbers in the pile, as these, surrounded by coarser coal, form ducts or flues that concentrate the warm currents from the coal below.

Take care to prevent an accumulation of fine coal in one part of the pile as, for example, directly below the opening through which the coal has been put in. If this fine coal is scattered through the pile it is not so likely to heat.

With these precautions observed there is practically no danger of spontaneous combustion in small piles, say less than 20 tons.

UNITED STATES AS COAL MINE OWNER

Large coal lands are owned by the United States Government and are leased out by it to private operators, says Dr. H. F. Bain, director of the Bureau of Mines, in his annual report.

Just at present coal mining in the public domain is overshadowed by private industry because of prior development of mines in the Eastern States; but the industry will become more important as time goes on. Every effort is accordingly being made to establish the new system on a correct basis, properly to protect the public interest in safe and efficient mining, and not unduly to hamper private initiative in operation.

Coal is now being mined under lease in Washington, Montana, North Dakota, South Dakota, Wyoming, Utah, Colorado, New Mexico and Nevada.

On the public lands proper the Bureau of Mines is now charged with supervision of 29 coal leases, 200 coal-prospecting permits, five coal licenses, one phosphate lease, one oil-sand lease, one potash lease, and several potash prospecting permits. In all, nearly 240,000 acres scattered through 10 states require supervision, and the acreage is rapidly increasing. The work is directed through a mining supervisor with headquarters at Denver, Colo.

ANTHRACITE COAL TAX VALID

The anthracite coal tax of the State of Pennsylvania was upheld by the United States Supreme Court in its decision of November 27. The Court in the opinion written by Justice McKenna, maintained that anthracite is not a commodity in interstate commerce and that a tax is therefore not a violation of the commerce clause of the Federal Constitution. The court also held that there is a distinct difference between anthracite and bituminous and that the state has the right to tax one and not the other.

The case was that of Roland C. Heisler, plaintiff in error, versus the Thomas Colliery Company et al.; Samuel L. Lewis, auditor general of the Commonwealth of Pennsylvania et al. The state law of Pennsylvania imposes on anthracite a tax of one and one-half per cent ad valorem "on the value thereof when prepared for market." The decision affirms a former one of the Supreme Court of the State of Pennsylvania. Attorneys general of adjoining states appeared in the case, contending that the tax is unconstitutional.

Nine attorney generals of adjoining states held the tax to be illegal and an attempt to regulate interstate commerce; the court held that the fact that anthracite coal is situated in nine counties in Pennsylvania causes it to be "too definitely situated" to be classified as an "article of interstate commerce."

The court rejected the theory that products of a

state destined to have a market in other states are subjects of interstate commerce, even though they have not moved from the place of their production or preparation. If this theory were accepted, the court states, "it would nationalize all industries, it would nationalize and withdraw from state jurisdiction, and deliver to Federal commerce control the fruits of California and the South, the wheat of the West, and its meats, the cotton of the South, the shoes of Massachusetts, and the woolen industries of other states at the very inception of their production or growth, that is, the fruits unpicked, the cotton and wheat ungathered, hides and flesh of cattle yet on the hoof, wool yet unshorn, and coal yet unmined, because they are in varying percentages destined for and surely to be exported to states other than those of their production."

AMERICAN COAL IN SWITZERLAND

A special correspondent to the *Chicago Journal of Commerce* writing from Switzerland, says:

It is generally recognized in Switzerland by the coal importers and users that American coal is of superior quality, but much of its value is lost through its frequent handling. In some instances it has been estimated that 50 per cent of the coal value was lost on its way to the consumer. The loading onto ships by means of chutes and the unloading from ships to cars and from cars to cars cause the lumps to pulverize.

According to the views expressed by the directors of the Zurich City Gas Works, officials of various industrial plants and local dealers, there is still a market in Switzerland for American coal if the United States can arrange to compete with English coal prices c. i. f. Rotterdam. American coal of good quality, like Pocahontas, Westmoreland or Fairmont coal, ought to find a ready market in Switzerland because of the fact that it contains such a low percentage of waste matter and less sulphur and ash than European coal. At present and until January, 1923, contracts for American coal are open for small quantities only—say, about 6,000 or 7,000 tons—but after that date contracts for larger quantities will be available.

ENGLISH COAL EXPORTS

England is making great strides to break the record she made in 1914 in the exportation of coal, and during the first 10 months of 1922, says the Bankers' Trust Company of New York, she has exported 51,672,984 tons of coal, more than for any full year since 1914.

Great Britain's largest coal exports were made in the year of 1913. In the first 10 months of 1913 the coal shipments totaled 61,257,261 tons. In the corresponding period of the present year the tonnage shipped amounted to 5 per cent of the highest pre-war exports. British coal exports to France, Netherlands and Belgium during the January-October period were larger than the exports to those countries in the same period of 1913, and Great Britain's coal trade with Germany in 10 months of 1922 almost equaled that trade in the same months of 1913.

In the 10 months of 1913 Great Britain exported to France 10,644,929 tons and in the same period in 1922 10,803,734, while it shipped to Netherlands, 1,712,193 in 1913 and 4,878,506 in 1922, 1,728,225 to Belgium in 1913 and 2,394,351 in 1922, and to Germany, 7,619,413 in 1913 and 7,100,684 in 1922.

The great recovery of the British-German coal trade in the present year is apparent from a comparison of the above tonnage with British coal exports to Germany in the first 10 months of 1920 and 1921, which were respectively 2,395 tons and 559,890 tons.

COAL AND THE RAILROADS

About half of the freight loaded on our railroads, according to the estimate made by a well-informed man experienced in both mining and transportation, is contributed by our coal mines. This portion includes coal loaded at the mines and coke loaded at the ovens, both consigned to consumers all over the country, and coal loaded for the railroads themselves, as well as articles of mine equipment and supply loaded at industrial centers more or less distant from the coal mines. Even though this figure may later be shown, on fuller presentation of the facts, to be somewhat high, the big outstanding truth is that the coal mines and the railroads are copartners on a large scale in the business of the country. This copartnership, based on mutual interest,—the railroads being the largest purchaser of coal and the mines being the largest customer of the railroads—gave special significance to a conference held recently between a representative committee of the American Railway Association and the United States Coal Commission.

The railroad men present at that conference showed their desire to cooperate in the work of fact-finding by suggesting subjects on which they could contribute statistical facts. The perennial topic of car shortage is only the introduction to the larger questions—What investment in railroad equipment is justified to meet the demands of an

overdeveloped mining industry? What can the public afford to pay to accommodate its own seasonal demand for coal? The operating officials of the railroads can also point to the effects of seasonal movement of coal and other commodities on the cost of operation of their roads.

The coal operators are themselves not unmindful of the peak demand for transportation arising in part from the seasonal demand for coal. One large mining corporation in the Middle West has several times made its annual appeal to its customers for early purchase of coal in the form of a full page reproduction of a photograph of two huge locomotives snow-bound on the track, with the simple legend "Lest you forget 1917-18." Such a reminder is pertinent every year, for the greater part of the American public either forgets or has never learned the obvious connection between snow-clogged freight yards and delayed coal at the very time when coal is most needed. How much of this seasonal burden on the railroads can economically be avoided is one of the questions the American Railway Association can help President Harding's Coal Commission to answer. Possibly the consuming public can itself also help in lowering the cost both of hauling coal and of mining it.

RECOMMENDATIONS FOR COAL INDUSTRY

In answer to a letter sent out to the National Coal Association's Bituminous Operator's Special Committee requesting advice and suggestions, the Committee gave the following reasons for present difficulties in the business:

The monopolistic control of mine labor by absentee labor officials.

Nation-wide as well as local strikes brought about by an irresponsible and autocratic organization.

Lack of adequate railroad service and transportation.

Unnecessary and uninformed competition among the buyers of coal.

Appeals by agitators and propaganda of different kinds designed to breed dissatisfaction and create unrest among the people at large.

Certain principles cannot be ignored, the committee went on to say, among them being:

That every man has a right to work without either interference or compulsion when, for whom and upon such terms as he sees fit.

That while workers may organize for legitimate purposes, such organizations have no right to impede or restrain those who do not care to join or deal with them.

That the right of private property is and must remain inviolable.

That the law of supply and demand always has and always will determine prices; that no legislation can long interfere with the rule; that any interference can only be justified, if at all, in time of war; that at any other time it will produce greater evils than those which it seeks to suppress.

Two things are essential for the successful op-

eration of the coal business, first adequate transportation; second, freedom from labor troubles.

SEE END TO NEED OF FUEL ADMINISTRATION

President Harding believes that January 1 will see greatly improved conditions in the coal situation and that then he can declare the coal emergency rulings at an end and suspend further enforcement of the Federal Fuel Distribution Act. The President made this statement when he requested C. E. Spens to remain in his office as fuel distributor until the first of the new year, notwithstanding the fact that his 60 day leave of absence from the Burlington Railroad has expired.

Under the terms of the act creating the Federal fuel distributor the measure becomes inoperative whenever the President declares that the emergency is at an end. As a result of improved conditions Mr. Spens has issued orders modifying regulations made effective soon after the creation of his organization.

"Regulations requiring bituminous coal operators to furnish the Federal fuel distributor with daily statements as to coal loadings, prices obtained for coal, and destinations to which coal is shipped were revoked today by Federal Fuel Distributor Spens, effective December 1," said a statement issued by his office.

The retail coal and grain elevator business of Frank Stafford at Bluffton, Ind., has been purchased by A. P. Kelley.

Coal, building material, farm products, and machinery are to be handled by the Niantic Farmers Grain Company of Niantic, Ill.

The Hutchings-Fose Grain Company of Salina, Kan., has sold its retail coal and grain business to the Terminal Grain Company.

A retail coal business is to be conducted at Floydada, Texas, by the Booth Bros. in connection with their grain business and warehouse.

The interest of B. F. Montgomery in the Tahoka Coal & Grain Company at Tahoka, Texas, has been sold by him. He has moved to Carlsbad, N. M.

The Schramm Grain & Coal Company has been organized at Pierce, Neb., by A. O. Schramm. He has purchased the yard and elevator of George E. Drebert.

The coal and grain business of R. D. Foreman at Center Hall, Pa., which was operated as the Foreman Grain Company has been purchased by William McClenahan.

Capitalized at \$10,000, the Farmers Union Coal Company has been incorporated at Fairfield, Iowa, to handle coal, fuel, grain, hay, seeds, and farm products. J. A. Stucker and Ross Anderson are interested.

Coal is to be handled by Bowers & Atherton of Williamsburg, Ill., who will also handle grain. Elbin Atherton purchased an interest of R. E. Bowers in the business and will be actively associated in the business.

form feed label are bright. The committee was continued.

The second question related to the maximum fiber content of wheat mill feeds. Official standards were adopted as follows: Standard Middlings, 9.5 per cent; flour middlings, 6 per cent; red dog flour, 4 per cent maximum fiber. Tentative standards were continued as follows: Brown shorts, 6.5 per cent maximum fiber; gray shorts, 5.5; white shorts, 3.5; wheat mixed feed, 8.5; Hard (or Spring) wheat mixed feed, 9.5.

President W. F. Hand of Mississippi made an able presiding officer. Addresses were made by Henry C. Wallace, Secretary of Agriculture, and by Professor Harry Snyder of the Russel-Miller Milling Company.

The election of officers resulted as follows: President, H. H. Hanson, Dover, Del.; vice-president, H. A. Halvorson, St. Paul, Minn.; secretary-treasurer, Arthur W. Clark, Geneva, N. Y.

GRAIN RUST CONFERENCE

The Illinois delegates to the second annual meeting of the Conference for the Prevention of Grain Rust at the University Farm, St. Paul, on November 14, went on record as favoring a Congressional appropriation of \$500,000 for continuing the war on the common barberry bush next year and joined members from 12 other Spring wheat states in recommending that the various states participate in the campaign in proportion to their rust losses.

Seventy-five delegates attended the meeting. The

vote on the resolutions for further Federal and state appropriations was unanimous. The Illinois representatives were Frank I. Mann of Gilman, delegate from the Illinois Agricultural Association; O. T. Olsen of Springfield, superintendent of the division of plant industry of the state department of agriculture, and George H. Dungan, agronomist at the College of Agriculture, Urbana.

The principal speakers were James R. Howard, president of the American Farm Bureau Federation, and Dr. E. C. Stakman of the United States Department of Agriculture. President Howard described barberry eradication as one of the most important projects on the national program of the Farm Bureaus. Dr. Stakman, who has just returned from a trip abroad, reported that Western Europe has succeeded in controlling black stem rust by the eradication of common barberries.

"Wherever the bushes have been removed thoroughly, black stem rust no longer is feared by grain growers," he said. "The success Europe has had in reducing her cereal losses to negligible proportions should encourage America to redouble her efforts to gain similar results."

Reports of the progress of barberry eradication in this country were given by Dr. Carleton R. Ball and Dr. F. E. Kempton of the United States Department of Agriculture. Harrison Fuller, director of the Conference, told of the activities of his organization in pressing the educational campaign which is being conducted in co-operation with the Government's work in the field.

Officers of the Conference were re-elected. They are Governor J. A. O. Preus, of Minnesota, president; F. M. Crosby of Minneapolis, vice-president and Harrison Fuller, secretary-treasurer. Minneapolis will continue to be headquarters of the organization.

PERSHING SEES RETURN OF HORSE

General John J. Pershing praised the service of the horse in the army and emphasized the value of the horse on the farm and in the city in an address given at the annual dinner of the Horse Association of America in the Drake Hotel, Chicago, during the International Live Stock Exposition.

"There will never be anything," he declared, "that can take the place of the horse and the army mule in warfare. If we had had more horses in the World War, we might have done a great deal better than we did. There were occasions when the cavalry had opportunities that we knew how to take advantage of but could not because we did not have horses."

"I believe the horse is coming back into his own. The time has not come when the horse is seen only in museums and I don't think it is ever going to come. I believe there is a definite place for the horse and for his economical use in many practical ways on the farms and in the cities."

"It's the old mule that is the most reliable thing in the army. You can pack him, drive him, ride him, starve him, beat him and neglect him—do all sorts of things to him that you can't do to an automobile—and he is always there as long as he has four legs to stand on."

Brig. General George V. Moseley, Commander of the Sixth Corps area, also discussed the use of the horse, drafter and mule in war. He said that polo was continued in the army, not for the sport or the exercise, but to develop action and soldierly qualities in the men. "There is no power on earth that can plow an acre of ground as cheaply as a horse," George I. Christie, Director of the Indiana Experiment Station, told his hearers. He also said that the come-back of the horse in American agriculture was assured.

Other speakers were John A. Scott of Northwestern University; Robert McDougal, president of the Chicago Board of Trade; Arthur Hancock of Paris, Ky.; L. J. Elliott, president of the Imperial Bit and Snap Company of Racine, Wis.; G. R. McGowan, superintendent of the Stables Street Equipment of the American Railway Express Company; George W. Dixon, president of the Arthur Dixon Transfer Company, Chicago, and John W. Gaver of St. Paul.

The Horse Association of America is organized for the purpose of encouraging the use and production of horses and mules. Its officers are Wirth S. Dunham, president; R. Lawrence Smith and Frank H. Sweet, vice-presidents; William M. Brezette, treasurer; Wayne Dinsmore, secretary, and William E. Murphy, assistant secretary. Directors re-elected are Wirth S. Dunham, George S. Bridge, John W. Gaver, and the three newly elected are George Gerstenslager, H. A. Bascom and George B. Cavert.

IT is estimated that Holland will need, during the present cereal year, about 1,000,000 tons of corn, 600,000 tons of wheat, 150,000 tons of barley, 75,000 tons of oats, 15,000 tons of buckwheat and 9,000 tons of rye. These figures are very close to the actual import figures for the past cereal year. Much discontent exists among the growers, because the prices asked by retail dealers are not in proportion to the prices which the dealers pay to the growers.

ASSOCIATIONS

IOWA FARMERS' GRAIN DEALERS TO MEET

The Iowa Farmers Grain Dealers Association will meet in Des Moines January 23-25. Secretary J. P. Larson of Fort Dodge is preparing a program of wide interest which will contain the names of many prominent speakers.

SOUTH DAKOTA COOPERATIVES MEET

On December 5 the Farmers Grain Dealers Association of South Dakota met at Sioux Falls. A. L. Berg of Baltic was re-elected president; A. R. Foyer of Doland and A. Hoffman of Leola were elected directors for three years. The Board of Directors was authorized to solicit funds to help the Clark Elevator fight a test case on its income tax. The Norbeck-King Bill for intermediate farm credits was endorsed.

MEETING OF FEED CONTROL OFFICIALS

At the annual meeting of the Association of Feed Control Officials of the United States at Washington, D. C., on November 13 and 14, two important subjects were discussed. The first related to a uniform feed label which could be used in all states. A committee had been working on this matter for some time and presented a report which was adopted. Representatives from 16 states agreed to the label as presented, other states will require legislative action before it can be used. All pledged their efforts to get this legislation through, so that the prospects for a uni-



EASTERN

Mixing machinery is being installed by the Berkshire Coal & Grain Company of North Adams, Mass.

The grain and feed warehouse of D. G. Brinser at Rheems, Pa., has been purchased by J. L. Heisey & Sons.

A new \$35,000 grain and feed storage warehouse is to be erected at Utica, N. Y., for the Ogden Grain Company.

Morris Horvitz is president and treasurer of the Horvitz Grain Company of New Bedford, Mass., which was recently incorporated there.

The grain, milling and coal business of M. D. Leonard & Co., at Watertown, Conn., has been purchased by the Farmers Co-operative Association.

The A. M. Gabel Grain & Feed Business at Pottstown, Pa., has been purchased by H. J. Culver, formerly treasurer of the Savage Arms Company of New York.

To deal in grain and cereals, the Four-X Flour Company, Inc., of Brooklyn, N. Y., was incorporated, capitalized at \$20,000. William Kallman, J. Kallman and Sadie Auster are interested in the concern.

An addition of 1,000,000 bushels' capacity is to be erected at Buffalo, N. Y., for the Superior Elevator Company which will give the elevator a total capacity of 2,500,000 bushels, making this one of the largest elevators there.

MINNESOTA AND WISCONSIN

Phil L. Regnier is now manager of the Van Dusen Elevator at Ghent, Minn.

J. N. Jordahl is manager of the Farmers Grain Company, located at Storden, Minn.

The Farmers' Elevator at Starbuck, Minn., has been closed down because of lack of business.

After a period of idleness, The Chilton Malting Company is again in operation at Chilton, Wis.

William Hoppensteadt formerly of Fairfax, Minn., is building a new elevator at Cosmos (r. f. d. Buffalo Lake), Minn.

The elevator of John Cronan & Co., at Ross Creek, Minn., has been repaired, and new machinery has been installed.

A. O. Hilden has resigned his position as manager of Hanson & Walstad's elevator at Milan, Minn. He is succeeded by A. Olson.

The Rockville Elevator & Milling Company at Rockville, Minn., has gone into the hands of W. H. Koch, who has rented the building.

The Independent Elevator at Litchfield, Minn., is now being operated by Henry Hendrickson, who on December 1, succeeded E. E. Evenson as manager.

The plant of the Farmers Elevator & Mercantile Company at Ostrander, Minn., has been equipped with a Fairbanks-Morse Motor and a silent chain drive.

A part interest in the Kundtson Elevator at Bird Island, Minn., has been purchased by H. G. Egland, formerly of the Franklin Roller Mills of Franklin, Minn.

A new building is being erected at Faribault, Minn., for the Farmers' Co-operative Elevator Company. Rudolph Dogan will be in charge when completed.

The capital stock of the Cargill Elevator Company located at Minneapolis, Minn., has been increased from \$2,400,000 to \$4,000,000. The company has offices in First National-Soo Line Building.

To conduct an elevator and warehouse business, the Otto F. Nelson Company has been incorporated at Deer Creek, Minn., capitalized at \$25,000. The incorporators are: Otto F. Nelson and A. Nelson of Deer Creek, and B. R. Wilson of Wadena.

A. Vihstad, who resigned as manager of the Farmers Elevator Company at Redwood Falls, Minn., is succeeded as such by E. J. Zorn, who has been in the employ of the company for a number of years. Mr. Vihstad has gone with the Southern Minnesota Joint Stock Land Bank.

Extensive improvements are being made at the Milwaukee, Wis., house of the Froedtert Grain & Malting Company, which will make it one of the most efficient malt and grain handling plants in the country. A new boiler equipment is being installed

and a car capacity shipping hopper scale put in. Additional trackage facilities have been acquired. The grounds around the plant are also being beautified.

The R. C. Field Elevator at Osseo, Wis., has been rented by George Roberts of Hortonville, who will buy grain there this winter. Mr. Roberts has been traveling for a grain house for a number of years.

A grain and elevator business has been started at Franksville, Wis., by H. P. Hanson & Son, provided with a warehouse with capacity for 20 carloads of feed. In addition, a custom feed mill with gas engine motive power has been installed.

INDIANA

P. Reising & Sons have completed a new elevator at Poseyville, Ind.

Articles of dissolution have been filed by the Vandalia Elevator Company of Frankfort, Ind.

J. Anderson is manager of the Farmers Elevator Company at Franklin, Ind., succeeding A. C. Brock.

A preliminary certificate of dissolution has been filed by the Colfax Grain Company of Colfax, Ind.

A new grinder has been installed by the Pike Grain Company of Pike's Crossing (Lebanon p. o.), Ind.

C. O. Gifford is managing the property of the Farmers Co-operative Company at Ada (p. o. Brook), Ind.

The C. C. Smith Elevator at Mongo, Ind., has been purchased by William Hawk who is now back in the grain business.

E. A. Benedict succeeds Frank Samuel as manager of the Oxford Grain Company of Oxford, Ind. He was formerly with the Farmers Co-operative Company at Chase, Ind.

The Oaktown Grain Company of Oaktown, Ind., has changed its name to the Wabash Grain Company, although there is no change in ownership or personnel. Roy Clodfelder is owner and operator.

Improvements costing \$10,000 will be made to the house of the Lapel Lumber & Grain Company, of Lapel, Ind. Among the new machinery is a feed grinder and electric motor. Formerly steam power was used.

A large motor driven attrition mill has been installed by Carl Jessup who recently bought the controlling interest in the Jay Cereal Company at Elwood, Ind. The firm will also handle all kinds of poultry feeds, Alfalfa meal, meat scraps, egg mash, scratch feeds, etc., in addition to millfeed, flour, hay, straw and salt.

THE DAKOTAS

The Farmers Elevator Company at Maxbass, N. D., is to repair and overhaul its elevator.

The Powers Elevator at Bowesmont, N. D., has been repaired preparatory to operations this fall.

C. A. Dahl is succeeded as agent at Portland, N. D., for the Farmers' Elevator Company, by D. Sparrow.

Repairs and general overhauling is being given the plant of the National Elevator Company at Argusville, N. D.

M. Adler is no longer manager of the Kintyre Grain Company at Kintyre, N. D., but is succeeded by John Tonander.

E. N. Morgan has left the elevator at Canova, S. D., where he was manager and is now manager of a house at Junius.

J. M. Bedient is in business at Wimbledon, N. D., as the J. M. Bedient Grain Company. He was formerly at Grand Island, Neb.

B. J. Murray is manager of the Farmer's Elevator Company at Griffin, N. D. He was formerly at Ellsworth as agent for the Davenport Elevator Company.

The Woodworth Elevator, Glenburn, N. D., is being repaired following the settling of the ground underneath the house. About 30,000 bushels of grain leaked out when the building settled.

A 30,000-bushel elevator is to be erected at Devil's Lake, N. D., for the Farmers' Grain Company, replacing the one which burned a short time ago. The elevator will be equipped with two legs, a modern double distributor, 12 bins, slab foundation and a 15-horsepower Fairbanks-Morse Type

"Z" Engine, 100-bushel Fairbanks Scale, 10-ton, 16-foot Fairbanks Dump Scale and truck dump and other modern handling apparatus.

The elevator of the Farmers' Company at Buffalo, N. D., which burned is to be rebuilt immediately. C. Osman is manager.

An addition has been built to the elevator of the Nye-Schneider-Jenks Company of Colome, S. D., which will double the capacity of the house.

The Farmers Equity Elevator Company of Moselle (p. o. Wyndmere), N. D., is succeeded by the Moselle Elevator Company. Stanley Jackson is treasurer and manager.

The Huron Grain & Coal Company has been incorporated at Huron, S. D., capitalized at \$43,000. The incorporators are Delbert McDaniels, W. D. Murley and B. A. Granston.

John Berg of Cooperstown, N. D., has purchased the property of the Glenfield Co-operative Company at Glenfield, N. D. The company operates a grain elevator and handles lumber and coal.

John P. Plucker and his son of Lennox, S. D., have purchased from the Atlas Elevator Company of Minneapolis, Minn., the elevator at Lennox. They will take possession immediately.

WESTERN

L. Gammon has practically completed his new elevator at Colorado Springs, Colo.

The Gleason Grain Company of Jerome, Idaho, is planning on the erection of a 25,000-bushel elevator there.

Articles of incorporation have been filed by the Inland Grain Company of Ogden, Utah. Its capital stock is \$50,000.

The Harlem Milling Company has completed a new 22,000-bushel grain bin at Harlem, Mont. L. L. Barton is manager.

Jennings & Roller of Wray are building a new elevator at Burlington, Colo., which will have a capacity of 27,000 bushels.

The elevator of the Carter Farmers Elevator Company at Carter, Mont., has been rented to the Greely Elevator Company.

The William Bain Elevator at Poplar, Mont., has been purchased by Thomas D. Campbell of the Montana Farming Corporation.

The capital stock of the Palmerton-Moore Grain Company at Farmington, Wash., has been decreased from \$50,000 to \$30,000.

The elevator of the Northern Grain & Warehouse Company at Hardin, Mont., has been sold to J. H. Jesser and C. A. Wolcott.

A complete and modern starch making plant has been purchased and installed by the Toppenish Elevator Company of Toppenish, Wash.

The University Farm at Davis, Calif., is to be furnished with a new granary, possessing the latest and most efficient seed cleaning machinery.

The interests of W. H. Smith in the Chehalis Grain & Fuel Company at Chehalis, Wash., have been purchased by Joe Schuss of Hartman & Nathan.

R. K. Shanklee, C. C. Milhoan and R. L. Martin have been incorporated at Keenesburg, Colo., as the Keenesburg Elevator Company. Its capital stock is \$20,000.

An addition has been built to the elevator of the D. J. Toomey Produce Company of Newcastle, Wyo., and will be equipped with an up-to-date mill and scale.

The Yellowstone Elevator Company operating elevators at Forsyth and Sumatra is building a new elevator of 150,000 bushels' capacity at Ingomar, Mont.

A building is being erected at Escondido, Calif., for the Escondido Lumber, Hay & Grain Company. It will be used for uptown headquarters by the grain company.

The interests of the Pacific Coast Elevator Company at Harrington, Wash., are to be conducted by H. P. Stone of Lamont. Mr. Stone has been with the firm for six years.

All of the eastern Oregon grain houses of J. F. O'Bryant, president of the Portland Grain Company of Portland, Ore., have been sold by him. He has sold all of his stock in the Marshall Grain Company, and six warehouses were sold by him, three to the Haines Grain & Elevator Company, one to

the Baker Mill & Grain Company and two to the Marshall Grain Company. Mr. O'Bryant will devote his full interest to the Portland Grain Company.

The property of the Colusa Milling & Grain Company at Colusa, Calif., was purchased in the bankruptcy court by A. J. Lowell. He will improve it and open it for business.

Hugh McDonald and Mr. Gordon have taken over the Taylor-Osborne Flour Mill & Elevator at Essex, Mont., and will operate as the Gordon-McDonald Milling Company.

The Imperial Elevator annex at Malta, Mont., has been repaired. A part of the building was damaged when overloaded a few weeks ago and a new foundation was made necessary.

D. G. Williams formerly grain buyer for the Rocky Mountain Grain Company at Sun River, Mont., is now grain inspector for the firm at Great Falls, and sample flier for the Royal Milling Company.

Articles of incorporation have been filed at San Francisco, Calif., by I. L. Borden, J. V. Mendenhall and A. J. Ottem as the California Bean Growers' Warehouse Corporation. Its capital stock is \$100,000.

The Garland and Powell (Wyo.) Elevator property has been taken over by the recently organized Powell Elevator Company. The three concerns will be under the management of A. W. Finch. The elevator at Garland will be conducted by R. L. Gillison; those at Powell by Mr. Finch, assisted by Harry Tingleff. The Persson Elevator will be used for storage only. The main office will be located at the North Elevator.

SOUTHERN AND SOUTHWESTERN

Louis W. Cherry has established a grain and flour brokerage business at Little Rock.

The Farmers Co-operative Elevator at Hopeton, Okla., is now operated by A. C. Emberson.

A grain elevator is to be erected at Corpus Christi, Texas, by Frank Kell of Wichita Falls, Texas.

Two new machines are being installed by R. A. Carr in his grain cleaning department at Maysville, Ky.

The H. H. Flam Grain Company has purchased the elevators of Lester Stone at Wildorado, Texas, and Adrian.

Clarke Howell & Co., were recently organized at Little Rock, Ark., to conduct a grain and flour brokerage business.

S. H. Morgan of Guyton has purchased the property of the Port Wentworth Mill & Elevator Company at Savannah, Ga.

A fireproof grain storage house costing \$50,000 is to be erected at Louisville, Ky., by the Gold Proof Milling Company.

Thomas and Gordon Steed of Pine Bluff, Ark., have established a wholesale grain, feed and grocery store at Smackover, Ark.

J. W. Stogner, J. N. Benson and Orville Doherty, have incorporated at Hedley, Texas, as the Farmers' Equity Union. Its capital stock is \$20,000.

Russell Jones has purchased the property of the Kevil Coal & Grain Company at Kevil, Ky. He will be associated with Paul Jones as the Jones Bros.

Percy Jones & Co., who conducted a warehouse at La Center, Ky., are succeeded by Jones & Co. The warehouse is being remodeled to handle field seeds.

J. R. Myers of Scottsville, has purchased the Lancaster Flour Mill & Elevator Company at Lancaster, Ky. Mr. Myers will do general flour and feed business.

Foy & Vance are now operating the elevator at Eufaula, Ala., which was formerly owned by the Eufaula Mill & Elevator Company and which was recently sold by order of the court.

To deal in grain and mill products, Paul T. and L. E. Jackson and Bernard M. Coleman of Oklahoma City, Okla., has incorporated as Paul T. Jackson. Its capital stock is \$10,000.

Elmer Rhoads, J. E. Hopkins, V. Rout, J. T. Stinson and Ed Stobaugh have incorporated at Crescent, Okla., as the Stobaugh Cotton & Grain Company. Its capital stock amounts to \$15,000.

The Scannell-Winters Grain Company of Oklahoma City, Okla., has dissolved. Frank Winters has organized the Winters Grain Company. Mr. Scannell will be in charge of the Scannell Grain Company.

The Farmers' Co-operative Company of Erick, Okla., has changed its name to that of the Farmers Co-operative Elevator Company, capitalized at \$25,000. J. W. Brady, J. J. Balkcans and G. B. Toon, are interested.

The Pearson & Simpson Commission Company, Inc., of Montgomery, Ala., succeeds John F. Pearson in that city. Mr. Pearson is president and Robert H. Howell, vice-president and John W. Simp-

son, secretary and treasurer. The new company will continue in the grain, hay, feed and cottonseed and peanut products business.

Incorporation papers have been filed by the Hillsboro Grain Company of Hillsboro, Texas, capitalized at \$3,200. The incorporators are J. B. Hill, J. T. Meredith and D. R. Walls.

Walter A. Barlow is no longer with the Houston Mill & Elevator Company of Houston, Texas, but is with the Oklahoma City Mill & Elevator Company as assistant to general manager.

A 1,200-foot pier, 494 feet wide, is to be erected at the new municipal grain elevator at Norfolk, Va. The contract has been let for the pier which will cost \$680,000. It will be completed within a year.

CANADA

The Inland Seas Elevator Company, Ltd., was recently incorporated at Winnipeg, Man.

A 1,000,000-bushel elevator will probably be erected at Goderich, Ont., for the Goderich Elevator & Transit Company, Ltd.

The plant of the Canadian Elevator Company at Indian Head, Sask., has been purchased by the Crescent Elevator Company.

James Wilson is now associated with the J. H. Speirs Company, wholesale grain and seed dealers of Saskatoon and Moose Jaw, Sask.

The capacity of the Western Terminal Elevator Company of Ft. William, Ont., is to be increased from 2,000,000 bushels to 3,000,000 bushels.

C. J. Minnett has sold his elevator and other interests at Delia, Alta., to Mr. Phillips, formerly of the Wolfe Elevator Company. Mr. Minnett will return to the United States.

A wholesale and retail business in grain and feed is to be conducted at Montreal, by J. A. L. L. L. Letters patent were recently granted by the Province of Quebec to the company.

A site has been purchased at Fort William, Ont., by the Bole Grain Company on which it will build an elevator with a capacity of 1,000,000 bushels. It has purchased the site from the N. M. Patterson interests.

James Stewart of the Saskatchewan Co-operative Grain Export Company, Ltd., and the recently organized James Stewart Grain Corporation, is interested in the erection of a 2,000,000-bushel elevator at Fort William, Ont.

To conduct a general grain and milling business, the Russell-Bell Flour Mills, Ltd., has been incorporated at Newmarket, Ont. The incorporators are George Gilson, M. Gilson and M. Wright. The firm is capitalized at \$60,000.

The N. Bawlf Grain Company, Ltd., has plans made for the erection of a terminal elevator at Port Arthur, Ont. It will be of concrete construction, with capacity of 1,500,000 bushels. The Bawlf company owns and controls 160 elevators in three prairie provinces, with grain capacity of over 5,000,000 bushels.

OHIO AND MICHIGAN

The business of the Robinson Grain Company has been moved from Deshler to Lima, Ohio.

The elevator of the Reid Bros. at Emmett, Mich., has been purchased by the Emmett Local Farm Bureau.

An elevator is to be put into operation at Big Springs, Ohio, by C. T. Hines who will handle grain, coal, salt, etc.

The grain, hay, and feed and flour business of H. F. Buerkle at Batavia, Ohio, has been sold by him to George Gregg.

The Sheets Elevator Company of Cleveland, Ohio, has purchased two 26-inch motor driven Bauer Attrition Mills.

Elliot & Beasley have equipped their elevator at Moline (Walbridge p. o.), Ohio, with a new sheller. The firm is also making other improvements.

The interests of Morgan, Roberts & Co., at Thornville, Ohio, have been purchased by W. M. Morgan and Co., who will carry on the business.

John Sellers is no longer manager of the Farmers Exchange at Fredericktown, Ohio, but is with the McMillan Grain Company of Fort Wayne, Ind.

The elevator of the Martindale Bean & Grain Company of Bay City, Mich., at Posen, Mich., has been rebuilt. The old house burned a few months ago.

The property of the Romeo Farm Bureau Mill & Elevator Company at Romeo, Mich., has been purchased by the Knust Milling & Elevator Company.

The grain elevator at Capac, Mich., which until recently was owned by the H. P. Stoughton Estate will in the future be conducted by A. Tosch & Sons.

The three elevators of the Haviland (Ohio) Elevator Company which W. S. Bricker recently purchased are to be managed as follows: the one at

Haviland by P. B. Hipkins; that at Tipton, by Carl Glass, and that at Worstville by Howard Eitnear.

The Octa Grain Company of Octa, Ohio, has just installed a new Bauer Ball Bearing Attrition Mill, purchased from the Bauer Bros. Company of Springfield, Ohio.

The Grand Rapids Grain & Milling Company of Grand Rapids, Mich., is now a stock company, with authorized capital stock of \$15,000 common and \$10,000 preferred.

Repairs have been made recently to the plant of the Delaware Farmers Exchange Company of Delaware, Ohio. A dust collector and Alsop Bleaching Outfit were installed.

The Dewine grain business at Cedarville, Ohio, has been purchased by Raymond Ritenour, stock shipper of Cedarville. Lee Fawley, who has been manager of the Dewine business, has gone to farming.

The Hessian Elevator at Delphos, Ohio, has been leased by F. B. Schmelzer from Judge John F. Lindemann, trustee in bankruptcy for Samuel Hessian. Mr. Schmelzer will operate as F. B. Schmelzer & Son.

The stock and elevator of the Farmers Co-operative Elevator Company at Flushing, Mich., have been purchased by the Flushing Elevator Company. Chatterton & Son of Lansing and Mount Pleasant are back of the company.

The West Jefferson Elevator Company has been incorporated at West Jefferson, Ohio., capitalized at \$40,000. The incorporators of the firm are: W. H. Sidner, Eva B. Sidner, Gladys Weber, W. H. Headley and F. P. Weber. The interest of David Swisher in Swisher, Weber & Co., at London, Ohio, has been sold to Howard Sidner, who is a member of the West Jefferson Elevator Company. The firm will handle grain, coal, tile, fencing, etc.

MISSOURI, KANSAS AND NEBRASKA

Remodeling is to be done to the L. A. Jordon Elevator at Winona, Kan.

Remodeling has been completed on the William Slaughter Elevator at Sholes, Neb.

The Hawlins Bros. are building a 20,000-bushel elevator and flour mill at Ozark, Mo.

The elevator of Tudor and Co., at St. John, Kan., has been leased by the St. John Mills.

A new elevator has been completed at Edson, Kan., for the Shannon Grain Company, which will operate it at once.

The house of the Farmers Union Co-operative Association at Otis, Kan., is to be overhauled and operated.

A new elevator is to be erected at Barney (p. o. Peru), Neb., for the A. B. Wilson Grain Company.

The Colorado Milling & Elevator Company of Winona, Kan., has completed a new elevator there.

The late T. H. Wilson is succeeded as manager of the Liberal Elevator Company of Liberal, Kan., by L. Vanderhoofen.

I. N. Hill is succeeded as manager of the Jamesport Farmers Mill & Elevator Company at Jamesport, Mo., by C. R. May.

The Shannon Grain Company's new 27,500-bushel elevator at Shannon, Kan., is opened for business with Earl Ground of Hastings, Neb., as manager.

The H. W. Smith Hay & Grain Company of Fredonia, Kan., is building an addition to its house and will handle the Purina line of feeds.

A. W. Hutchinson is succeeded as manager of the Farmers Co-operative Mill & Elevator Company at Wamego, Kan., by E. P. Barrett.

The house of the Derby Grain Company at Brewster, Kan., is to be improved and equipped with a new motor.

The elevator at Aurora, Kan., was recently purchased from the Home Grain Company by the Robinson Milling Company.

The interest of A. C. Wagner in the Hebron Grain Company at Hebron, Neb., has been sold by him.

The Herndon Grain Association of Herndon, Kan., has completed a 140x20 feet lumber shed there.

The Green Ridge Elevator & Trading Company of Green Ridge, Mo., has filed a petition of dissolution.

A new elevator is to be erected at Craig, Mo., for the Farmers Elevator Company. R. E. Seller is manager.

E. D. Allen has leased the elevator of the Farmers Co-operative Business Association at Seneca, Kan.

Michael Smith is now manager of the Farmers Elevator & Lumber Company at New March (Hastings p. o.), Neb. He was formerly in charge of the elevator of the Farmers Union at Hayland.

A concrete 20,000-bushel elevator has been completed at Winfield, Kan., for the Farmers Union Co-operative Association. The Monolith Builders,

Inc., did the work. It is 40 feet high, contains nine bins and is electrically driven.

E. L. Ward has sold the elevator at Gardner, Kan., to L. M. Blacker who is converting it into a corn plant.

Improvements have been made to the elevator of J. C. Fowler at Paola, Kan., and a warehouse has been erected.

The elevator at Venango, Neb., formerly owned by the Venango Equity Company has been purchased by the Farmers' Union Co-operated Grain Company.

A reinforced concrete elevator of 60,000 bushels' capacity and a warehouse are to be erected at Columbia, Mo., for the Boone County Milling & Elevator Company.

The property of the Farmers' Grain & Supply Company at Ensign, Kan., is now being operated by Fred E. Vance, formerly with the Peoples' Grain Company of Wilmore.

Articles of incorporation have been filed by the Geneva Co-operative Grain Company of Geneva, Neb. Its capital stock is \$25,000. J. C. Bortner is president of the company.

The property of the Farmers Union Co-operative Grain & Supply Company at Redwing, Kan., has been sold to P. J. Meyers and Henry W. Bortz who will continue the business.

A 16,000-bushel reinforced concrete elevator has been erected at Cameron, Mo., for the Cameron Co-operative Elevator Association. The Monolith Builders, Inc., have the contract.

The Farmers Co-operative Milling & Elevator Company of Wamego, Kan., has changed its motive power from steam to electricity. The electricity will be purchased from a local power company.

The elevator of the Farmers Union Co-operative Company of Kinney, Neb., has recently been repaired and equipped with a new automatic water pump on the engine. The driveway to the elevator was reggraded.

J. R. Strader is now with the Farmers' Exchange at Maitland, Mo. He was formerly manager of the Farmers' Elevator Company in Barnard and later with the Farmers' Exchange of Maryville.

A new elevator costing \$19,000 is to be erected at Salisbury, Mo., for the Farmers Elevator Company. It will replace the one destroyed by fire. A feed grinding mill will also be included in the equipment.

IOWA

Walter Ristvedt is manager of the elevator at Coulter, Iowa.

A new elevator is to be erected at Iowa City, Iowa, for O. H. Carpenter.

Greig & Zeman are succeeded in business at Estherville, Iowa, by Greig & Son.

C. L. Taylor is succeeded as manager of Gilchrist & Co., at Monona, Iowa, by R. F. Wenger.

The Dakotah City Elevator Company has erected at Dakotah, Iowa, an addition of 12,000 bushels' capacity.

The Gilchrist Elevator at Bristow, Iowa, has been sold and will go into the hands of the new owners January 1.

C. H. McDermott of Anita succeeds L. R. Goff as manager of the Farmers' Co-operative Company of Fontanelle, Iowa.

A 10-ton Fairbanks Truck and Wagon Scale has been installed by the Farmers Co-operative Association of Boyden, Iowa.

The grain elevator located at Delta, Iowa, has been purchased by J. P. Bowden. He will make several repairs on the house.

The Betts Elevator at Hull, Iowa, has been sold. H. Beckman, who has managed the elevator, will continue in the draying business.

A grain business is to be conducted at Rockwell City, Iowa, by A. Croft of Kirkman. He was formerly located at Kirkham, Iowa.

The elevator at Hull, Iowa, which for 27 years has been under the management of Tom Mackie, has been sold to another company.

Floyd Erickson has given up his position as manager of the Farmers Elevator at Stanhope, Iowa, and is succeeded by Robert Rice.

The Johnson & Lundahl Elevator at Madrid, Iowa, has been taken over by Arthur McCabe of Stanhope. Mr. McCabe will not take charge until March 1. Mr. Johnson retired because of poor health.

The old elevator at Roland, Iowa, formerly owned and operated by O. M. Anenson, has been leased by him from the Farmers' Co-operative Company. The Farmers company purchased the house last May from Mr. Anenson.

The Piper Grain & Milling Company of Cedar Rapids, Iowa, has made several improvements at its house to induce farmers to bring their grain to its house. It has installed a new truck and wagon

dump, new scales, corn sheller and grinder and in the near future will install a feed grinding equipment.

H. V. Cardiff is now with the W. H. Hubbard Grain Company of Mason City, Iowa. He was formerly with the Gardiner B. Van Ness Company.

M. H. Spurgeon of Correctionville has purchased the elevator of the Wilson Grain Company at Truesdale, Iowa, for the consideration of \$10,000. The sale includes the transfer of the lease of the M. & St. L. ground on which the elevator stands.

ILLINOIS

O. Livergood is in charge of the Niantic Farmers Grain Company of Niantic, Ill.

Edgar Humphrey succeeds John Mackey as manager of the elevator at Cordova, Ill.

The Farmers Elevator Company of Lowder, Ill., is building a 20,000-bushel ironclad elevator there.

The Boecker Coal & Grain Company's 20,000-bushel elevator at Naperville, Ill., is practically completed.

The name of the Corn Belt Grain Company of Mattoon, Ill., has been changed to that of the Corn Exchange Grain Company with R. G. Ernest as manager.

A. C. Parks is succeeded as manager of the Indiana Co-operative Company at Industry, Ill., by Paul Applegate. Mr. Parks has gone into the coal business.

Kelley Durbin is no longer manager of the Farmers Grain Company at Clarksdale, Ill., but will conduct a feed, flour and hay business at Findlay, Ill., after January 1.

The elevator and business of John L. Murphy at Sycamore, Ill., has been purchased by the Sycamore Farmers Company. Mr. Murphy will remain as general manager.

J. S. McDonald has purchased back the grain elevator and coal business at Morton, Ill., which he sold to Jesse C. Moore about 18 months ago. He is now operating it.

A coal house may be erected by Lewis & Haynes who recently purchased the elevator of George B. Conover at Haynes (p. o. Illiopolis), Ill. They will also handle salt.

A new 40,000-bushel elevator is to be built at Forest Park, Ill., by the Burrell Engineering & Construction Company for the Acme Minerals Company, which lost its plant by fire during the sum-

mer. A feed mill and warehouse will also be erected. The company now operates a plant under lease at Dixon, Ill.

The storage space of the Farmers Elevator Company of Morrison, Ill., is to be increased in the near future.

L. M. Nickerson has given up his position as manager of the Farmers Elevator Company at Kempton, Ill.

M. I. Virden is succeeded as manager of the Ohlman Co-operative Company at Ohlman, Ill., by F. J. Zimmerman of Lincoln, Ill.

A building at Morris, Ill., has been taken over by the Morris Grain Company which will convert it into a seed house, equipped with cleaning and handling machinery.

To deal in farm products, feed, fuel, etc., the Producers Grain Company was incorporated at Mattoon, Ill. A. B. Lidster, Elmer Phipps, O. B. Scott, T. W. Noil are interested.

C. A. Burke has sold the O. N. East Elevator at Milmine, Ill. to C. L. Smith of Olney, Ill. Mr. Smith is an old grain man and is well known both at Clinton and Hopedale.

The capital stock of Harrison, Ward & Co., grain dealers, of Bloomington, Ill., has been increased from \$150,000 to \$500,000, and the number of directors has been increased from seven to nine.

The elevator of the Farmers Elevator Company of Delavan, Ill., is being remodeled and will be covered with iron siding. A new office will be erected. The P. F. McAllister Company has the contract.

Harrison, Ward & Co., have taken over the business of C. P. Cline & Co., at Decatur, Ill. Mr. Cline will be manager. T. E. Hamman will retain his interest, but will not be actively associated with the firm.

The Grangers Elevator Company is erecting a new elevator at Manito, Ill. It is of reinforced concrete, consisting of eight bins and will have a capacity of 30,000 bushels. The equipment includes scales, a Fairbanks-Morse Motor, etc.

G. W. Graham has purchased an interest in the Richards Elevator at Richards (Streator p. o.), Ill. He already controlled the other half interest. Numerous improvements are to be made in the spring, including new elevator legs, belts and cups and other modern machinery.

OBITUARY

BASAILLON.—On November 27, Joseph C. Basailon died after an illness of three months. He was one of the best known grain merchants of Montreal and was a member of the Montreal Grain Exchange.

BLANCHARD.—George W. Blanchard, a prominent member of the New York Produce Exchange, and well known everywhere in the grain export trade, was found dead in bed, presumably of heart failure, on November 26. Mr. Blanchard had been active in the grain business since boyhood, having started the old export house of Power, Son & Co. about 1882. Subsequently he became active with the British Empire Grain Company and was afterwards head of the North American Grain Company. His connection with these firms covered a period of about 27 years. Besides being a member of the New York Produce Exchange he was also a member of the Chicago Board of Trade and of the Winnipeg Grain Exchange. In addition to his regular business interests he participated actively in the affairs of the Exchange, having served on several committees and having been a member of the Board of Managers from 1917 to 1919 inclusive. For a number of years he was one of the most indefatigable workers for the North American Export Grain Association, of which he was secretary and also a member of the Board of Directors, and so keen was his interest in this work that much of the time the chief cares of its administration were left to his discretion. As an indication of his kindly disposition and charitable nature, especially towards the children of the poor, he had for years been an untiring worker in behalf of the Year-End Festivities held annually on the huge floor of the Produce Exchange. Mr. Blanchard always added greatly to the enjoyment of the occasion, and particularly for the little ones, by assuming the part of Santa Claus for the distribution of the gifts to the children.

BOWKER.—Frank C. Bowker died recently at Portland, Ore. He was cashier of the Pacific Grain Company and a director of the Chamber of Commerce. His widow and two sons survive him.

CARMODY.—John Carmody died suddenly on No-

vember 22 from heart failure aged 76 years. He was a native of Oswego, N. Y., and for 30 years had been associated with H. B. Jenkins in the co-partnership of H. B. Jenkins & Co., of New York City. His widow and one daughter survive him.

CRANGLE.—B. A. Crangle committed suicide recently. He was interested in the grain business at Minneapolis, Minn., and reverses in the business and the failure of a grain elevator project are said to have caused him to take his life.

FELLOWS.—Charles Sumner Fellows was almost instantly killed when struck by an automobile. Mr. Fellows was 84 years and retired from business last August. He came to Minneapolis in 1896 with the Albert Dickinson Company and was second vice-president of the Twin City Trading Company, an auxiliary of that firm at the time of his retirement. He was a member of the Minneapolis Chamber of Commerce and was at one time a member of the Chicago Board of Trade.

GEHRING.—Joseph T. Gehring died recently aged 80 years. He had been connected with the Cleveland Grain & Milling Company during its 27 years of existence. He retired from active business about five years ago.

HIGHT.—Fred H. Hight died recently. He was proprietor of Hight Grain Company of Lynn, Mass.

KELLOGG.—Spencer Kellogg, president of the great linseed oil business and grain elevators that bear his name in Buffalo and other cities, died suddenly at his home in Buffalo, N. Y., on November 14, aged 71 years. His seven children survive him. Mr. Kellogg entered the linseed oil business when a young man and studied the field thoroughly making himself a specialist in his work.

LEMONT.—Fred I. Lemont died from heart failure recently, aged 56 years. He had conducted a feed business in Philadelphia, Pa., since 1896. This will be conducted in the future by his son.

LESTER.—Edward D. Lester died recently following a stroke of apoplexy. He was secretary of the J. M. McCullough Sons & Co., seed merchants of Cincinnati, Ohio. He was 57 years old.

M'DEVITT.—Aged 63 years, Frank McDevitt

died from heart disease on November 21, while on his way home from work. He was deputy state grain inspector of the State of Oregon and was stationed at Portland.

M'LAUGHLIN.—Daniel McLaughlin died recently at Louisville, Ky. He was for many years a prominent grain and hay dealer and formerly resided at Pana, Ill.

PATTISON.—On November 10, Thomas O. Pattison of the Morris Grain Company, Morris, Ill., died. He was 72 years old. His widow and two daughters survive him.

READ.—Following a stroke of paralysis, George Read died at his home in Memphis, Tenn. He was for many years prominent in the grain business and was associated with W. P. Brown & Co.

VAN STEENBERGH.—Aged 77 years, Samuel Van Steenbergh died from heart trouble. He was a prominent grain dealer and elevator operator and resided at Frankfort, Ind.

STARK.—After an illness of several months, William Mackenzie Stark died recently at his home

in Toronto, Ont. He was senior partner in the Stark Bros., grain dealers, and was a pioneer member of the grain business there, extending over a period of 50 years. One son and two daughters survive him.

WARD.—Aged 68 years, Lafayette Ward died at San Antonio, Texas. He was president of the Granada Mill & Elevator Company. Two sons, A. P. and Lafayette, survive him.

WOLFF.—Julius J. Wolff died recently following a short illness at Louisville, Ky. He was a member of the Central Seed Company of Louisville, Ky.

WASHER.—On November 29 after a long illness, W. S. Washer died on November 29. He was formerly president of the Kansas Grain Dealers Association and had been in the grain business at St. Joseph, Mo. since selling out his business at Atchison, Kan., to the Pillsbury Flour Mills Company.

WOOD.—Charles R. Wood died recently at Little Rock, Ark. He was a feed and flour broker there, entering the brokerage business seven years ago.

have started a fire on November 26 in one of the line elevators operated by the Wichita Mill & Elevator Company. The plant was totally destroyed.

Effingham, Ill.—On November 20 fire of unknown origin destroyed the house of the Robinson Grain & Elevator Company. The loss on building, grain, etc., amounted to \$25,000. It was only partially insured.

Covington, Tenn.—On November 14 fire destroyed the warehouse and grist mill of J. G. Owen. The loss on contents was \$7,000, covered by insurance; on building, owned by M. A. Ray, it was \$2,000, with no insurance.

Wood River, Neb.—Fire on November 27 destroyed the Hord Elevator together with contents with a loss of \$10,000. The fire is believed to have started from spontaneous combustion. J. E. Bridger is manager of the elevator.

Kearney, Neb.—Fire on November 9 destroyed the 75,000-bushel elevator of the Gibbons Grain Company. About 7,000 bushels of grain were in the house at the time. The loss amounted to \$70,000, covered by insurance. The company will rebuild.

Montgomery, Ala.—Fire on October 30 damaged to the extent of \$2,000, the property of the Hobbie Elevator Company. The loss is covered by insurance. A more serious loss was prevented by the quick response of the automatic sprinkling system which was installed throughout the house.

Thomasboro, Ill.—The lumber yards of the Thomasboro Farmers Grain, Lumber & Coal Company were damaged by fire. The elevator was also damaged; and nearly all of the grain was destroyed. The elevator will be repaired. The loss amounted to \$20,000; the insurance to \$5,000.

FIRES—CASUALTIES

Conway, Ark.—The Oglesby Feed Company suffered a loss of \$5,000 from fire.

Bury, Que.—Fire damaged quite seriously the feed and flour store of William Macaulay.

Lothair, Mont.—The elevator here owned by the St. Anthony & Dakota Elevator Company was destroyed by fire.

Columbus, Ohio.—The stock and building of the Midland Feed Company's store was damaged slightly by fire.

Westphalia, Ind.—On November 27 fire destroyed P. H. Easton's grain elevator with a loss to owners of \$25,000.

Pearl, Ill.—With a loss of \$20,000, the Donohoe Grain Elevator burned. The insurance on the house was \$13,000.

New Berlin, Ill.—The grain warehouse of Noah Twist burned on November 8. His other elevator burned some years ago.

Evansville, Ind.—Fire destroyed, with a loss of \$17,000, the feed warehouse, malt factory and home of Charles Stocker near here.

Grand Rapids, Mich.—Fire damaged recently the property of the Alfred J. Brown Seed Company. The loss has not been determined.

Ellsworth, Ill.—Fire destroyed on November 13 the elevator owned by Lauriston & Richardson. The fire started from a spark from an engine.

Gilmore, Mo.—On December 1 fire did serious damage to the elevator operated by the Farmers Grain & Supply Company. The cause of the fire is unknown.

Louisburg, Kan.—Fire from an unknown cause did serious damages to the elevator of the Farmers Co-operative Grain & Supply Company on December 4.

Blencoe, Iowa.—On November 9 the Blencoe Farmers Elevator Company sustained a small damage loss from fire which started from an unknown cause.

New Orleans, La.—Fire damaged the elevator of the Southern Railway Company with a loss of \$100,000. A damage of \$50,000 was done to the grain wharf.

Lavon, Texas.—Fire, the origin of which is unknown, started in the warehouse of R. L. Brown on November 26. There was no loss on either stock or grain tank.

Patton (Mt. Carmel, p. o.), Ill.—On November 24, the elevator of the Starckman, Stansfield & Schucker Company was totally destroyed by fire from some unknown cause.

Cranbury Station, N. J.—Damages of \$25,000 were done by fire to the Chamberlain & Barclay hay press and storehouse. Hay, fertilizer, seed, etc., were also destroyed.

Newberry, Ind.—Joseph Hakes & Co.'s elevator here burned on November 29. The elevator was valued at \$6,000. It contained no grain and was fully covered by insurance.

Rochester, N. Y.—Fire damaged to the extent of \$40,000, the property of the L. P. Gunson Seed Company. A damage of \$10,000 was done to the building and \$30,000 to contents.

Versailles, Ky.—Fire on November 16 destroyed the elevator and contents of the Cleveland & Co., grain, feed, coal and implement dealers. The loss amounted to between \$10,000 and \$15,000.

Zumbrota, Minn.—The Farmers' Elevator located at this place burned on November 13, resulting in a loss to owners of \$10,000. It was one of the

oldest buildings in that territory, having been built over 30 years ago. The building was insured for \$5,000. The Farmers' Elevator Company was the proprietor of the house.

Holliday, Texas.—Locomotive sparks are said to

HAY, STRAW AND FEED

COMMITTEEMAN APPOINTED

Irvin T. Fangboner of Bellevue, Ohio, has been appointed to serve on the Hay and Grain Joint Committee of the Grain Dealers National Association. Mr. Fangboner is also a member of the National Hay Association and has been such for 20 years.

BETTER DEMAND FOR HAY

In a recent market letter, Albert Miller & Co., of Chicago say:

Timothy: There was a ready sale today for all offerings while not enough No. 1 to go around.

Clover and Clover Mixed: Good local demand for all of good color and we have a good outside demand for all grades.

Alfalfa: Demand keeps good. Offerings light.

Prairie: Offerings which continue light are meeting a ready sale. Packing hay wanted.

EXPORTS OF PREPARED FEEDS

According to the Department of Commerce our exports of prepared feeds (not medicinal) for the month of October, the last for which figures have been assembled, amounted to 1,220,135 pounds. 370,420 pounds went to Germany, with England next with 264,700 pounds, and Cuba following with 176,626 pounds. Germany was also the biggest buyer of screenings, with 1,404,200 pounds. An interesting item among feed exports for the month was 80,000 pounds of rice bran and polish to Japan.

INFERIOR RICE FOR FEED

N. Hero of New Orleans has discovered a new dehydration process for manufacturing hay out of the rice plant which will make possible the utilization of low quality rice not worth harvesting and milling. The *Bull's Eye* in an article describing the process said that in a recent experiment with a few tons of rice kernels as well as stalk, a fine grade of hay, green in color and chopped into lengths of one inch and less was produced. The rice itself explodes under heat and is very palatable. The machine is a long cylinder heated by a continuous charging current of hot air.

WALT STICKS TO BALED HAY

The editor of a Kansas paper wishes Walt Mason, now that he is in fruitful California, would find an expression to substitute for "a bale of hay," which Walt sometimes uses.—*Kansas Notes*.

La Jolla, Calif.—To the *Kansas Notes*: I am sorry that any of the Kansas brethren object to my occasional reference to that noblest product of our civilization, the bale of hay.

Long ago I worked with a hay press gang in Nemaha County, Kansas. There were no walking delegates in those days, Mr. Gompers wasn't gomp- ing to any noticeable extent, and we worked about

14 hours a day, so as long as the daylight lasted, and then, in gathering dusk, we loaded the fragrant bales on wagons. Whenever anybody mentions "hard work" in my hearing, I think of those dear dead days now gone beyond recall, and I can smell the prairie hay, and hear the clanking of the old press.

I am an authority on hay; if I had time I'd lecture on this topic, on the chautauqua circuit. Every time I smoke a candidate's cigar, or swallow vegetable soup at a cafeteria, I think of hay, and the old days of hard work in Nemaha County. Is it strange that my poems treat of hay now and then?—Walt Mason in *Kansas City Star*.

HAY SCARCITY WORRIES IOWA FEEDERS

Decreased hay supplies are causing western Iowa stockmen more anxiety this year than the corn market, according to farmers and feeders who have been in from that section this week buying cattle says the *Omaha Journal Stockman*.

In some cases Harrison County farmers report only a third as much hay on hand as a year ago. They will spread out their hay supply as far as possible by using corn fodder for roughage as more corn was cut up in that section this year than for many seasons. Farmers who do not ordinarily cut up any corn have as much as 50 acres cut and shocked this fall.

OAT HULLS IN FEEDINGSTUFFS

The Seed Branch of Canadian Department of Agriculture has issued Circular No. 11, entitled "Oat hulls and their use in feedingstuffs." The circular explains in very explicit terms the uses to which the hulls of oats have in the past been frequently put, and the danger that follows to livestock from eating feedingstuffs containing them. The term "in the past" is used because since the passing of the Feedingstuffs Act by the Dominion Parliament in 1920, the practice has not been so common. Still there appear to be some manufacturers who continue to make illegal use of the hulls either unmixed or mixed with other materials to an extent that it is difficult to determine. The circular explains that the unmixed hulls are almost invariably pulverized and appear on the market under attractive brand name; also often without the proper labelling required by the provisions of the Act. Mixed, the hulls may occur with more or less ground oats, when in instances they pass as oat chop; or with one or more ingredients as commercial feedingstuffs—in which case that Act requires that their presence should be stated—and with mill feed either with or without screenings. In all cases, as the circular further explains, the hulls constitute feedingstuffs within the meaning of the Act and when sold in accordance therewith,

their use in such feeds is perfectly legal. Contrary, however, to the provisions of the Feedingstuffs Act they have been and continue to be used as an adulterant in all types of feedingstuffs. It is gratifying to be able to state that the fraudulent use of oat hulls has gradually declined during the past year, and that only comparatively few manufacturers now endeavor to evade the provisions of the Act in respect of their use.

GROW MORE CLOVER

Approximately 1,000,000 acres are cropped each year in Minnesota to Clover and Timothy mixed and Clover alone.

All the other legumes combined total about 60,000 acres. Of the non-leguminous crops, Minnesota produced nearly 16,000,000 of acres. This gives

better conditions for growth and grain is less apt to lodge under such conditions.

Clover should not be pastured down close during the first fall. Much of the growth made the first season is necessary to protect the plants during the winter.

HAY INSPECTORS QUALIFY

There is now more promise of uniform grading of hay than at any time since the hay trade was established. Federal grades have been promulgated and the regulations announced by the Secretary of Agriculture. These regulations may be obtained by anyone interested by writing to H. C. Taylor, chief of Bureau of Agricultural Economics, Department of Agriculture, Washington, D. C.

An inspector, under the Federal regulations, must

backs. Bulls appear confident and many predict still higher levels. Several hundred bags delivered on December contracts again this week, most of it going into strong hands. Seed houses reporting better demand for Clover, with country offerings light. On account of decrease in receipts and improved cash demand dealers are removing some hedges, purchasing both nearby and deferred futures. New York reports exports this week 2,200 bags. Receipts this week 1,233 bags. Shipments 285. Total receipts season to date 25,693 bags, compared with 20,857 bags a year ago.

Alsike strong and higher on better demand and light offerings. Many think it good value at nearly \$3 discount under Clover. Receipts this week 105 bags. Shipments 232 bags.

Timothy ruled firm, with trade inactive. New York reports exports 1,415 bags. Baltimore 300 bags. Receipts this week 332 bags.

STATE GRADES FOR ALFALFA HAY IN TEXAS

Notice has been published by Chas. E. Baughman, Texas State Commissioner of Markets and Warehouses, under authority given him by the Texas Statutes that he has established the following grades on Alfalfa hay which are now effective:

Choice Alfalfa—shall be reasonably fine leafy Alfalfa, of bright green color and may contain either 5 per cent foreign matter or bleached Alfalfa, or 5 per cent of both combined. Well cured, sound, sweet and well baled.

No. 1 Alfalfa—May be reasonably coarse leafy Alfalfa, of green color, or reasonably fine leafy Alfalfa of good color, and may contain either 10 per cent foreign matter or bleached Alfalfa, or 10 per cent of both combined. Well cured, sound and well baled.

Standard Alfalfa—May be of greenish color, of coarse or medium texture, 20 per cent bleached Alfalfa and 5 per cent foreign matter; or it may be of a greenish cast, of fine or medium texture, 20 per cent foreign matter and 10 per cent bleached Alfalfa. All of same to be sound and well baled.

No. 2 Alfalfa—Shall be any sound and well baled Alfalfa, not good enough for standard.

Any Alfalfa that contains enough grass burrs or Russian thistle to materially effect its feeding value or handling, will be classed as Alfalfa containing excessive burrs, or may be classed as no grade Alfalfa.

FACTORS CONTROLLING FEED PRICES*

Prices for wheat feeds are controlled largely by potential supplies and production in surplus-producing sections. However, the availability of other feedstuffs which may be used as substitutes is an important factor. It is not uncommon in a section where liberal supplies of other feedstuffs are available to find prices of wheat feeds quoted materially lower than in sections where supplies are scant. This in spite of the fact that both sections may be the same distance from production centers. Not infrequently the prices for wheat feeds quoted by one local newspaper differ materially from those appearing in another newspaper published in the same city.

The main reason for this is that when feeds are not actively traded in the quotations published will be either those which prevailed at the time the last sale was made or those which represent the idea of a dealer regarding the price which he possibly may realize for one or more cars. Some other dealer may quote another newspaper on the basis on which he thinks wheat feeds may be bought, resulting at times in a wide difference between the prices as published by the two newspapers.

In heavy consuming and producing centers, and in cities where exchanges are located, the range between the prices quoted in the various local publications is usually narrow. In Western States and in Pacific Coast markets where exchanges are few the range between prices quoted is often large. Even in such markets as Portland, Ore., and Seattle, Wash., which have exchanges where bids and offers for feedstuffs are made, wide variations in quotations appear at times. Actual transactions take place privately in these markets and the prices at which sales are consummated are usually not made public.

In most of the western markets similar conditions prevail. In the absence of exchanges, bids and offers are made by telephone and frequently meetings are held to reach an understanding on less-than-carload prices. The quotations appearing in newspapers in these markets are sometimes the actual prices obtained for one or more lots, but often they are estimates reached after a careful consideration of all circumstances by dealers. Many newspapers fail to show whether prices quoted are per bag, per ton, or per carload. Most of them, however, quote prices per bag as furnished by local retail feed dealers. Sometimes western dealers who handle stuff for local and neighboring country mills

*This article is taken from Bulletin No. 1124 of the Department of Agriculture, entitled "The Marketing of Mill Feeds." In later issues we will publish further portions of the bulletin.—ED.



STUDYING HAY GRADES AT THE ALEXANDRIA LABORATORY

for the state as a whole one acre of leguminous crops to every fourteen and a half acres of non-legumes. On well diversified farms where the aim is to maintain or increase the productivity of each acre, the ratio of leguminous crops to non-leguminous crops is usually from one acre to three to five acres.

In order to approach the desirable ratio, Minnesota should increase the use of legume forage and hay and more than double her acreage of legumes, says A. C. Arny, in charge of farm crops for the University of Minnesota. The largest part

take a course of instruction at the Hay Standardization Laboratory, Alexandria, Va. Inspectors from seven important markets have qualified by taking this course as follows: William M. King, Bureau of Agricultural Economics, Washington; Richard J. O'Brien, New York Hay Exchange Association, 601 West 33rd Street, New York, N. Y.; H. H. Whiteside, Chicago Hay Exchange, 714 Postal Telegraph Building, Chicago; Charles Molin, Commercial Exchange of Philadelphia, Bourse Building; P. R. Dunn, City Hall Annex, Boston, Mass.; W. F. Green, Richmond Grain Exchange, Thirteenth



GROUPS OF HAY INSPECTORS AT THE LABORATORY IN ALEXANDRIA, VA.

of any decided increase in acreage will be Medium Red Clover and Medium Red and Alsike mixed with Timothy, for the reason that these Clovers are well adapted to the conditions on the large majority of the farms in this state. However, other leguminous crops should be grown where they are better adapted than the Medium Red Clover. Mammoth Red Clover is better adapted to the sandy areas than Medium Red or Alsike. On poorly drained soils Alsike Clover takes a prominent place. On the heavy lands Sweet Clover is continually gaining as a pasture plant. On light sandy soils properly prepared Alfalfa is the best legume, and on all the heavy well-drained lands that are not acid a much greater acreage of this crop may be grown to advantage.

Medium Red Clover usually mixed with Timothy is sown with a grain crop. The grain crop is sown at the usual rate, although a somewhat lighter seeding gives the Clover and Timothy a better chance. Lodging of the grain crop results in the loss of the Clover stand. Therefore on very productive soils grain crops that are not likely to lodge should be chosen. Flax and wheat do not lodge as easily as oats or barley.

A firm seed bed gives the Clover and grass plants

and Cary streets, Richmond, Va.; S. N. Swartwout, New York State Hay & Grain Dealers Association, Auburn, N. Y.

Shippers will undoubtedly have an increased confidence in grades established by these qualified inspectors, so much so, in fact, that it will be only a short time before all the hay markets will send men to Alexandria to take the course offered. Hay grading will always be largely a matter of judgment with the inspector, but his judgment will be infinitely better after taking the course, and this applies to all, no matter how long they have been in the business. An analysis of hay bales shows that the average inspector is usually a long way off in his grade designation and that the average shipper is still farther off. So we will have much better inspection and the hay trade will be on a far more dependable basis than before.

CLOVER MAKES NEW HIGH

"Clover continued its upward trend again this week, reaching new high levels on the crop", say Southworth & Co., of Toledo, Ohio, in their letter of December 9. "Some profit taking on the advance, also fresh hedging pressure, mostly in deferred futures. Good support in evidence on moderate set-

quote to newspapers a lower price than that prevailing, while dealers who trade in stuffs shipped in from the East often overstate the price, presumably to be able to make a more favorable impression regarding conditions on prospective purchasers.

Other reasons for variations in prices are—

(1) Lack of agreement among dealers as to the volume of offerings.

(2) Purchases made at favorable figures by some dealers which are placed on the market at prices out of proportion with those quoted by dealers who must buy at prevailing prices.

(3) Unsold stuff in transit which is often disposed of by sacrifice on arrival.

(4) Forced purchases often made to fill contracts.

The lack of uniform grades for wheat feeds is another important obstacle to satisfactory price statements.

Still another difficulty lies in the confusion of meaning attached to a quotation. Is a quotation a record of a transaction, an offer, or a bid? The price furnished by a dealer may be one of these three. If it is one at which a trade was made, the question arises whether it was for cash, or for prompt, or for future shipment. It may have been a representative transaction, a sacrifice sale, or a forced purchase.

If the price quoted was an offer, it may have been for either prompt or future delivery. What is the duration of the offer? A dealer may state a price which he submits as an offer. If he is confronted by a customer he may modify his offer or he may withdraw it. Often a dealer submits a quotation when he wishes neither to sell nor to buy. The figure that he names is his idea of the value of the commodity in his market.

From producing or milling centers prices will be quoted at which a buyer can secure a carload of stuff. From consuming sections prices are quoted which are paid to the jobber or commission man or sometimes prices at which transactions between dealers are consummated.

HAY BECOMES FIRMER IN NEW YORK

BY C. K. TRAFTON

As a general thing during the month under review, the hay market has been extremely sluggish and stagnant. Many members of the trade have manifested much bewilderment because of the indifference displayed by virtually all buyers. As one facetious dealer remarked "A good many horses must have been eating sawdust." At all events it seems patent that owners have been feeding their horses in a decidedly sparing manner. It is true, of course, that a great many horses have been comparatively idle recently, but this hardly accounts for the small consumption. In any case it is difficult to understand what horses have been eating because the demand for oats has also been quiet.

In view of the facts described it might justly be assumed that prices have declined to a materially lower plane, but this is not strictly true as the drop in prices was remarkably gradual; indeed almost imperceptible. Still this latter was not considered strange because it was easy to observe that stocks were light as receipts have been conspicuously small and therefore the daily offerings at various terminals have been frequently insignificant. This was particularly true of markets in the Borough of Brooklyn which was ascribed to the fact that receipts via rail have continued decidedly meager. Offerings were slightly larger in Manhattan and particularly of common and low grades in small bales, which was attributed to the arrival of moderate quantities via river boats. Nevertheless in spite of this it must be acknowledged that only a few boats have come down the river lately and it is fair to presume that river navigation will soon stop as it usually does with the advent of colder weather.

There are numerous astute and experienced members of the trade who have felt surprised and disappointed because of the weak undertone. They have expected greater steadiness as invoices have indicated a diminution in shipments from the interior, farmers and country shippers showing dissatisfaction and unwillingness to sell on account of the lower bids. According to advices received from the interior, farmers have been making insignificant deliveries to country stations claiming that they would not sell because prices were under cost of production. In addition it was also pointed out at this juncture that hay did not seem dear when compared with oats, corn, mill-feed, etc. Authentic reports received from other parts of the interior suggest that the light shipments were partly traceable to the continued small supply of cars and engines.

On numerous occasions it has been exceedingly difficult if not impossible to obtain positive quotations as there has been an unusually wide difference of opinion among the various elements as to values. Obviously this was largely the natural outcome of the stand-off between the limited demand on one hand and the meager supply on the other. This naturally has resulted in great irregularity and unsettlement, with a conspicuous man-

ifestation of puzzlement on the part of the expert. However, it must be admitted that conservative or unprejudiced dealers were counting on more firmness hereafter. They could see no warrant for anticipating further noteworthy declines as long as stocks continue so light, and furthermore they would not be astonished to see greater firmness unless receipts suddenly become heavier.

Late in the month there was a decided change in the temper of the market, weakness being succeeded by a more buoyant feeling. It was the consensus of opinion that jobbers and dealers had permitted their stocks to run down to a low plane as they had anticipated bigger receipts which failed to materialize, and consequently they became anxious to replenish. In order to achieve this promptly they found it necessary to make higher bids.

As a rule the straw market has been decidedly steady and narrow although in November there was a slightly weaker tendency more especially in inferior grades. Afterwards the demand became fair and with receipts insignificant there was a firmer trend and especially in choice or No. 1 long rye.

There has been no radical change in the general situation of the market for horse feed although there has been a continuance of the strong undercurrent noted last month. Buyers have continued to display lively interest in choice feed especially heavy graded and as offerings were light a small advance was obtained. The firmer trend was ascribed partly to the light supply of concentrates, namely Alfalfa meal and molasses. Moreover advices from the interior state that large quantities had been sold in the South and Southwest as a result of the bad condition of pasturage.

NEW FEED BRANDS

"SUGARINE RECORD" dairy feed and scratch feed. The Sugarine Company, Inc., Owensboro, Ky. Filed February 1, 1922. Serial No. 158,732. Published October 10, 1922.

"RECORD" dairy feed and scratch feed. The Sugarine Company, Inc., Owensboro, Ky. Filed February 1, 1922. Serial No. 158,733. Published October 10, 1922.

"VICTORY" food for chickens, ducks, turkeys, geese, etc., including laying mash, growing mash, scratch feed, large, intermediate and chicken size.

Pratt Food Company, Philadelphia, Pa. Filed December 6, 1921. Serial No. 156,338. Published October 17, 1922.

"RYDE'S STARTRITE" chicken food. Ryde & Co., Chicago, Ill. Filed February 3, 1922. Serial No. 158,387. Published October 10, 1922.

"ROUND-UP" horse and cattle feed. Pease & Dwyer Company, Memphis, Tenn. Filed February 8, 1922. Serial No. 159,051. Published October 17, 1922.

"MUSTANG" horse feed. Omaha Alfalfa Milling Company, Omaha, Neb. Filed November 30, 1921. Serial No. 156,107. Published October 17, 1922.

"PALMETTO PURE PRODUCTS BRAND" scratch feed, poultry mash, chick feed, poultry feed.

horse feed, mule feed, dairy feed, hog feed, cornmeal and corn feed meal. Carolina Milling Company, Inc., Dillon, S. C. Filed November 5, 1921. Serial No. 155,048. Published November 7, 1922.

"PIONEER" poultry feed. Omaha Alfalfa Milling Company, Omaha, Neb. Filed February 3, 1922. Serial No. 158,833. Published November 7, 1922.

"QUISENBERRY QUALITY" poultry feed. Quisenberry Feed Manufacturing Company, Kansas City, Mo. Filed January 19, 1922. Serial No. 158,144. Published November 7, 1922.

"GLOBE A 1" animal stock feeds and poultry feed. Globe Grain & Milling Company, Los Angeles, Calif. Filed October 5, 1920. Serial No. 137,934. Published November 7, 1922.

"REAL" pancake flour, animal feeds, etc. Schreiber Flour & Cereal Company, Kansas City, Mo. Filed February 27, 1922. Serial No. 159,890. Published November 7, 1922.

"ALLFEED HORSE FEED" horse feed, hog feed, fowl feed and dairy feed. Allfeed Milling Company, Nashville, Tenn. Filed November 29, 1921. Serial No. 156,894. Published November 7, 1922.

"NO. 18 ATEEN" dairy feed. Gulfport Grocery Company, Gulfport, Miss. Filed November 26, 1921. Serial No. 155,960. Published November 14, 1922.

"BIG LEAGUE" dairy feed, scratch feed, horse and mule feed, and hog feed. John M. Wilson, doing business as the Meridian Grain & Elevator Company, Meridian, Miss. Filed February 27, 1922. Serial No. 155,960. Published November 14, 1922.

"EGG MAKER" poultry feed. Albers Bros. Milling Company, San Francisco, Calif. Filed September 6, 1921. Serial No. 152,602. Registered and published November 21, 1922.

"DANISH" cottonseed meal. Humphreys-Godwin Company, doing business as Hugh Humphreys, Memphis, Tenn. Filed August 27, 1920. Serial No. 136,556. Registered and published November 21, 1922.

"DAIRY SPECIAL" dairy feed. International Sugar Feed Company, Minneapolis, Minn. Filed January 3, 1922. Serial No. 157,427. Registered and published November 21, 1922.

"ALINCO" stock and poultry feeds comprising linseed oil meal, dairy feed, scratch feed, laying mash, poultry fattener, hog growing feed and hog fattener. American Linseed Company, New York, N. Y. Filed March 30, 1922. Serial No. 161,477. Registered November 28, 1922.

Trademarks Registered

159,901. Animal, bird and poultry feeds. The H-O Cereal Company, Inc., Buffalo, N. Y. Filed May 13, 1921. Serial No. 147,666. Published July 12, 1921. Registered October 10, 1922.

159,928. Cow feed. William J. Lawther, Dallas, Texas. Filed August 20, 1921. Serial No. 151,992. Published March 14, 1922. Registered October 10, 1922.

160,032. Dairy ration. The Ubiko Milling Company, St. Bernard, Ohio. Filed December 17, 1919. Serial No. 126,201. Published March 14, 1922. Registered October 10, 1922.

160,969. Poultry food. M. W. Sleight, Dallas, and Cuero, Texas. Filed September 27, 1921. Serial No. 153,413. Published June 13, 1922. Registered October 31, 1922.

160,029. Calf feed, dairy feed, scratch feed, chick feed, stock feed, horse feed, hog feed, poultry mash and chop feed. Thomas-Boyce Direct Feed Company, Attica, N. Y., and Indianapolis, Ind. Filed January 10, 1921. Serial No. 142,050. Published January 10, 1922. Registered October 10, 1922.

161,392. Stock feed. Albers Bros. Milling Company, San Francisco, Calif. Filed January 10, 1921. Serial No. 152,814. Published August 15, 1922. Registered November 14, 1922.

161,496. Stock and poultry feeds. cornmeal, wheat and rye flour. Hardeman-King Company, McAlester, Okla. Filed July 22, 1921. Serial No. 150,811. Published August 8, 1922. Registered November 14, 1922.

161,508. Poultry feed, scratch size. International Sugar Feed Company, Minneapolis, Minn. Filed April 15, 1919. Serial No. 117,492. Filed April 15, 1919. Serial No. 117,492. Published August 15, 1922. Registered November 14, 1922.

161,647. Poultry feed. Tioga Mill & Elevator Company, Waverly, N. Y. Filed September 10, 1921. Serial No. 151,814. Published August 15, 1922. Registered November 14, 1922.

HAY CONDITIONS IN ST. LOUIS

BY S. F. LARRIMORE

Receipts of hay in the St. Louis market during the past month have been rather light, is some instances being less than enough to satisfy the demand. The quality of the offerings were fairly good, consisting of Timothy, Clover, Clover Mixed, Alfalfa and moderate receipts of Prairie. The Timothy market continues to rule firm with an active local demand for the better grades of Timothy, which are in scant receipt and excellent demand. The lower grades are in liberal supply and quiet. There is a light movement of hay and steady prices are anticipated.

Light Clover Mixed hay is firm, shipments being

(Continued on page 439)

FIELD SEEDS

KEEPING SEEDS IN TROPICS

The intense heat of the Tropics has presented the problem to agriculturists of keeping viable seeds from harvest until planting time. The Federal Experimental Station on the Island of Guam has been endeavoring for some time past to find a solution for the trouble and has finally done so by devising a simple container made of metal or glass, so surrounded by coconut or other slowly volatile oil as to make it moisture, insect and rat proof. Seeds free from insects and insect eggs and properly dried when placed in the tank will keep in good condition and maintain their germinating power indefinitely.

LESPEDEZA SEED SHORT

Dry and hot weather during the blooming period of lespedeza seed will result in that crop being short for the year 1922, says the Department of Agriculture. The average yield per acre is low and many fields were not harvested. Shippers at practically all shipping points anticipate that their shipments of the 1922 crop will be 25 per cent to 50 per cent less than their shipments of the 1921 crop last season.

The new crop seed is, however, of good quality. The carry-over of old seed by growers and local shippers is said to be heavier than usual, ranging from 5 to 20 per cent in the principal producing sections of Mississippi, Louisiana and Alabama.

CZECHOSLOVAKIA IMPORTS SEED CORN

Czechoslovakia in the past has imported most of her seed corn from the Argentine, but agriculturists now say that American grown corn, especially from North Dakota, Minnesota and Wisconsin is far superior for seeding purposes in that new republic. This is especially true of corn desired for silage as South American corn will not sprout in silos as successfully as that from the United States.

The acreage planted to corn is being extended, the average yield is being increased and the people are being instructed in the value of corn as a food,—all of which will make an ever increasing market for seed corn. The farmers are also learning the value of silage for livestock and increased livestock raising will be made possible through the building of silos.

NEW SEED BILL

A high standard for the purity of seeds, featuring truth in name, type and grade in addition to high germination and freedom from all weed seeds, is advocated in the new Capper Pure Seed Bill which will come before Congress in its coming session.

It provides that seedsmen can apply for registration of seeds, a voluntary matter absolutely, admission being conditioned on producing and having for sale seeds which the Department of Agriculture will certify as being of grade. This would involve inspection by Government agents during the growth of the seeds and of the business methods of the seeds men.

The law has the approval of the Secretary of Agriculture and the endorsement of representatives of farm organizations, canners and the seed trade.

HOME GROWN ALFALFA SEED IN MICHIGAN

The difficulty growers had in marketing their supply last year and the lower prices prevailing toward the end of the season were important factors in reducing the acreage harvested in 1922.

Michigan farmers used about 175,000 pounds of home grown Alfalfa seed during the year 1922, according to estimates made by Prof. Cox, head of the Farm Crops Department at the Michigan Agricultural College.

"It has not yet been proven that Alfalfa seed production is commercially profitable in Michigan on a large scale," says Professor Cox, "but many farmers have found it advantageous to set aside several acres for seed production for their own use and sale in the neighborhood.

"Home grown seed from well established fields of proved hardiness is, if properly matured, excellent for planting in Michigan. Should the mid-summer season prove to be warm, with average or less than average rainfall, the second crop of Alfalfa can be expected to set seed successfully, if allowed to stand for seed production.

"The heaviest yields of Alfalfa seed are secured from yields on light loams. Old fields which are becoming thin usually set seed better than new seedings. The yields reported to the farm crops department at Michigan Agricultural College during

the past season by farmers who produced seed range from one to three and one-half bushels per acre, an average of approximately two bushels per acre.

"An extensive increase is being made by members of the Michigan Crop Improvement Association of the new Hardigan Alfalfa, recently released from the breeding plots of Prof. F. A. Spragg, of the college station. A considerable supply of this high seed yielding strain should be available for next year's planting.

"Where possible Grimm, Cossack, or other Alfalfa varieties of known dependability should be saved for seed."

USE OF GOOD SEED WHEAT INCREASES

According to the weekly bulletin of Missouri College of Agriculture, fully 20,000 bushels of approved seed wheat was grown and sold in Missouri this year. Of 27,422 bushels of approved seed wheat grown by Missouri farmers in 1922 and listed for sale during the seeding season by the Missouri Corn Growers' Association and the State Marketing Bureau 17,118 were actually sold and used for seed. Additional sales made by growers who have not yet filed their reports will bring this total up to 20,000 bushels of true-to-name, disease-free, weed-free seed wheat of adapted varieties inspected approved, listed, sold and sown this year.

This quantity of wheat was sown on approximately 16,000 acres on which the crop of 1923 will be at least 2½ bushels per acre greater than if ordinary seed had been used. The college experts estimate that 40,000 additional bushels of wheat will be harvested without increased investment in land or labor.

FORAGE SEED IMPORTS

The following amounts and kinds of seed were admitted from November 1 to 15, to the United States under the Seed Importation Act:

Kind of Seed—	Nov. 1-15, 1922	July 1-Nov. 15, 1922
	Pounds	Pounds
Alfalfa	229,900	5,490,300
Canada bluegrass	11,200	47,800
Alsike clover	100,200	3,453,600
Crimson clover	10,100	1,002,500
Red clover		226,600
White clover	13,800	256,300
Alsike clover and timothy mixtures		6,600
White and alsike clover mixtures	2,100	7,700
Grass mixtures		100
Mixed agrostis		2,600
Broom-corn millet	200,000	908,200
Orchard grass		517,600
Rape	56,000	972,500
Redtop		7,600
English rye grass	124,900	706,100
Italian rye grass	44,000	326,000
Hairy vetch	64,800	291,000
Spring vetch	33,100	523,600

USING DOMESTIC CLOVER SEED

Domestic Clover seed purchased from local dealers or directly from growers is best and cheapest, says L. E. Thatcher, assistant agronomist at the Ohio Experiment Station. Market reports show a steady increase in price for Medium Red and Alsike Clover seed up to about March 1 each year. That the price will advance this year seems likely in view of the recent tariff of four cents a pound on foreign seed. Repeated tests at the experiment station, he continues, have shown that the crop produced from seed imported from southern Europe is easily winter-killed and many Clover failures may be traced to the use of foreign seed. About 11,000,000 pounds of Red Clover seed is imported each year to be mixed with the domestic product. At this time 40 to 50 per cent of the crop is still in the hands of the growers. Mr. Thatcher suggests that orders be taken soon in view of the probable advance in price and, what is of greater importance, because of the greater assurance of getting domestic seed.

MONTANA ALFALFA SEED TO BE SOLD UNDER SEAL

As a result of the conference held by Commissioner of Agriculture Chester C. Davis of Helena, M. L. Wilson, representing the Montana Agricultural College, and A. J. Ogaard of Bozeman, secretary of the Montana Pure Seed Growers' Association, the decision has been rendered to place a state seal on all Alfalfa seed grown in Montana and exported from the state. Montana seed growers allege that they have lost large sums annually through the substitution of inferior foreign seed for the genuine Montana-grown Alfalfa.

The plan provides for determination that seed going into a carload was actually grown within the state; the filing of affidavits both from growers and shipper as to the origin and identity of the

seed; sealing the car; its re-inspection at terminal, and its re-sealing if it has been cleaned and re-sacked, for the state of Montana by agents of the inspection service of the department of agriculture of the state to which the shipment goes, under a co-operative agreement that will be worked out. It is also planned to keep a record of all incoming and outgoing quantity shipments of Alfalfa seed on file in the department of agriculture office which will aid in checking up on attempted substitutions.

VALUABLE INFORMATION

Would you like to know definitely just how many pounds of Crimson Clover are necessary to plant an acre, its average yield per acre in hay and seed, and the proper time for planting this legume? This information is available not only on all the Clover, but on millets, grasses, and other field seeds including wheat, barley, beans, rye, vetch, sorghums, oats, etc., in the unique "Seed Knowledge at a Glance" card, published by the Plant Seed Company of St. Louis, Mo.

The card gives you full information on the groups above stated including weight per bushel in pounds, pounds to seed an acre, time for seeding, average number of seeds to the pound, and the average yield per acre in hay and seed.

So in answer to our first question, we find that Crimson Clover has 60 pounds to the bushel; from 10 to 15 pounds are needed to plant an acre; the time for seeding is from July to September; there are about 150,600 seeds to a pound; the average hay yield is 2,500 to 5,000 pounds; the average seed yield is from 300 to 400 pounds.

This is a decidedly valuable placard which every seed dealer should have.

THE SEED ANALYSTS ASSOCIATION

During the recent seed trade conventions in Chicago, which were attended by a number of the best known seed analysts, the initial steps were taken toward the formation of an association. The completion of the preliminary organization is now announced under the name of the Association of Commercial Seed Analysts. J. E. Benedict, Jr., of the Commercial Seed Laboratory of Washington, D. C., is president, and E. E. Pattison of the Doughten Seed Company of New York City is secretary and treasurer. M. L. Spracher of Northrup, King & Co., Minneapolis, is chairman of the Membership Committee. These three comprise the Executive Committee.

The list of charter members of the Association is as follows: The Albert Dickinson Company, Chicago, W. C. Phaender; The J. Bolgiano Seed Company, Baltimore, Md., J. L. Anderson; Commercial Seed Laboratory, Washington, D. C., J. E. Benedict, Jr.; Commercial Seed Laboratory, Toledo, Ohio, W. L. Waldrom; Doughten Seed Company, New York, N. Y., E. E. Pattison; S. W. Flower Company, Toledo, Ohio, Fred Emmett; J. Chas. McCullough Seed Company, Cincinnati, Ohio, H. B. Peebles; Northrup, King & Co., Minneapolis, Minn., Macy L. Spracher; J. G. Peppard Seed Company, Kansas City, Mo., Edith Higgins; Vaughan Seed Company, Chicago, Ill., Leota Thurlimann; Whitney Eckstein Seed Company, Buffalo, N. Y., R. E. Evans.

The following are honorary members: W. L. Oswald, Chicago, Ill.; Mary E. Aker, Louisville, Ky.

The purpose of the Association will be to promote the best interest of the seed industry and to further encourage cooperation between the official analysts and the commercial agencies. It is the desire of the Association to have on its rolls every seed company and analyst who can qualify. The Association, therefore, encourages all to write to the chairman of the Membership Committee for application blanks. For seed companies not maintaining equipped laboratories the Association will at all times answer questions and offer suggestions. This Association has the endorsement of the leading official analysts.

SEEDS FIRM IN NEW YORK

BY C. K. TRAFTON.

In the local market for field seeds business has been fairly active and in some varieties the volume of trade would have been still larger had it not been for inadequate stocks, scarcity of offerings from abroad, or the prohibitive importing costs on account of the increased tariffs. Although quotations for the majority of varieties are on the same level as noted a month ago, the prevailing tone is steady to firm. Crimson Clover and Rapeseed are lower, but Alfalfa, Red Clover, Fancy Redtop, Canadian Bluegrass, Vetch, Sunflower, and Canary scored substantial gains.

Red Clover has advanced about one cent owing to decreasing stocks and the practical impossibility of replenishment from Europe. As a matter of fact, another month has passed without a single bag being imported, whereas the export movement has been much larger, the clearances including about 630 bags to the United Kingdom and 350 bags to Germany, compared with the October total of only 140 bags. Moreover, few offers have been received from France, and these embracing only small lots,

on a basis of 19 cents c. i. f. New York for fair average quality, which with the import duty is above the local basis.

Crimson Clover has declined about one cent as arrivals have been larger and buyers displaying little interest in offerings of French seed at 14 cents c. i. f. New York, compared with 14½ cents a month ago. Total arrivals were about 1,375 bags, against 550 during October.

White Clover, although not quotably changed, is decidedly firm owing to the strong foreign situation. One shipper offered a small lot of Polish seed at 45 cents c. i. f. New York, which is about the lowest price quoted here for spot seed. As a consequence buyers were again displaying eagerness to anticipate requirements, and hence the slightly larger arrivals, 210 bags, against 27 in October, had no effect.

Alfalfa, with an advance of about three cents, has been the most interesting item. The local market has had to contend on the one hand with a good demand from the West where it is quite evident the production was inadequate; and on the other hand with a progressively stronger importing situation. As only one steamer arrived with seed from Argentina—2,055 bags, against 2,865 in October, spot stocks were quickly cleaned up, local dealers retaining only enough to supply their small order trade. About a month ago Argentina was offering seed at 11½ to 12½ cents c. i. f. New York. Late in November 13 cents was quoted, and early this month 13½ cents was named. Cables from there stated that many American buyers were in evidence and that France, England and Germany were also buying. A later cable reported the market excited because of exhausted supplies of good quality seed. The advance in Argentine exchange rates was an unfavorable development from the viewpoint of American buyers.

Timothy prices have remained just about where they were a month ago in spite of a further marked enlargement in the exports. About 2,600 bags were shipped to the United Kingdom and about 1,725 to Germany; moderate clearances for France, Holland and Denmark bringing the month's total up to 5,325 bags, against about 3,400 during October, and only 295 bags in September.

Redtop shipments were also largely increased, and hence a further advance of about one-half cent was established. Total exports were about 3,450 bags, including 2,185 to the United Kingdom, compared with a total of only 490 during October.

Bluegrass was another variety to enjoy a much larger export movement, the total being 1,685 bags, including about 710 bags to the United Kingdom and 600 bags to Denmark. The October total was only 300 bags. Nevertheless, Fancy Kentucky Blue is quoted about the same as a month ago, while the Canadian variety is only one-half cent higher.

Rye grass has been firm owing to good demand

and inadequate stocks. In fact, a much larger business could have been done had supplies been ample. The arrivals showed another marked shrinkage, being only 550 bags for the month, against 1,720 in October. Moreover, further advances are noted in foreign quotations. English seed is now offered at 9 cents c. i. f. New York, compared with 8½ cents a month ago and 8 @ 8¼ cents previously, while Italy is offering at 8¾ cents c. i. f., against 8.40 cents a month ago. In addition, the seed offered is of extremely light weight; only 27-28 pounds for the perennial and 21-22 pounds for the Italian.

Orchard Grass has been in good enough demand to keep prices steady at previous quotations in spite of larger arrivals, 2,950 bags, against 840 during remained steady, foreign seed still being offered at October. Moreover, the importing situation has 12 cents c. i. f. New York for 90-90 and at 10 cents for 85-85. Some business has been done at these prices for shipment.

Hairy Vetch has been firm owing to good demand, limited arrivals, and the fact that German shippers ask 15 cents c. i. f. New York, compared with 13 cents a month ago. Total arrivals, mainly from Germany, were 1,025 bags, against 1,000 in October. In some cases the arrivals were of poor quality, it being necessary to have some lots cleaned before they could be passed.

Rapeseed on the spot has eased slightly owing to a striking increase in the arrivals, with more expected, and rather cheaper offerings from Japan. On the other hand, European seed is higher for shipment, both France and Holland quoting 7 cents c. i. f. New York, whereas French seed was offered a month ago at 6 cents. The advance in French exchange also increases the cost. Early this month the steamer *Lyons Maru* brought in what is believed to be the largest cargo of rapeseed ever carried on one ship, 9,285 bags or over 1,000,000 pounds. This was the first arrival of the new crop and represented the accumulation of numerous lots which had been sold for August-September shipment. Owing to lack of tonnage and other obstacles it was necessary to combine these with the September-October shipments. Still, most of this was sold before arrival, and hence it had almost no effect on the market. This cargo brought the total imports for the month up to 10,780 bags, against 2,823 during October. Japan is offering for December-January shipment at 5.30 cents c.i.f. New York.

Sunflower seed has been strong owing to a good demand, meager imports, and the strength in western markets, domestic seed being held at 7½ cents Missouri shipping points. Argentine is still offering at 5 cents c.i.f. New York, which with the duty makes the cost practically prohibitive. Manchurian seed is offered for December-January shipment at 7 cents c.i.f. The only arrival was 545 bags from South Africa, against nil in October.

Canary seed has been in good demand, and hence

the much larger arrivals, about 6,450 bags against 625 during October, had no effect on the market, spot seed being quoted at 5@5¼ cents. Moreover, the Argentine market is stronger, with offerings at 3¼ cents c.i.f. New York, against 3@3¼ cents a month ago.

Fescue has again had a good export movement, the month's clearances being 1,438 bags (to the United Kingdom), against 512 during October. Only one arrival was reported, 120 bags from New Zealand, against 1,100 during October. The month's arrivals included about 1,150 bags of various fancy grass seeds from Germany and Holland; also 519 bags of French millet.

MILWAUKEE SEED MARKET

BY C. O. SKINROOD

Larger receipts of Clover seed than normal appear to be the outstanding point in the monthly seed report of the Milwaukee Chamber of Commerce. The November figures on receipts of Clover seed are 586,985 pounds as compared with only 328,507 pounds for the corresponding month a year ago. Receipts of Clover seed for the past month were therefore almost double those for the same period in 1921. Shipments of Clover seed for the month past were 892,552 pounds compared with shipments for the corresponding month a year ago of 1,179,808 pounds. This indicates shipments were between 15 and 20 per cent less than in the previous year. Comparing receipts and shipments of Clover seed for November, 1922 shows that shipments were about 60 per cent larger than the receipts.

Receipts of Timothy seed for the past month were 569,227 pounds as compared with receipts for the corresponding month a year ago of 918,241 pounds. This indicates that receipts of Timothy were about 40 per cent less than for the previous year. Shipments of Timothy seed for the past month were 324,768 pounds as compared with shipments for the corresponding month a year ago of 283,413 pounds. Shipments were a little larger than for the previous year. Comparing receipts and shipments of Timothy seed for November, 1922, the receipts are 569,000 pounds in round numbers compared with shipments of 324,000 pounds. The receipts are almost double the size of shipments.

The official report of the seed market of Milwaukee for November by the Milwaukee Chamber of Commerce says that the seed market is firmer with a good demand, while the offerings are only moderate. Red Clover is quoted from \$15 to \$21, with an advance of 50 cents. The Alsike ranges from \$10 to \$15 and the White Clover from \$37 to \$47. The No. 1 North Western Flax ranged from \$2.44 to \$2.60, the poor to good Timothy from \$5.25 to \$6 and the choice to fancy \$6.25 to \$6.50.

The record of Wisconsin in producing and marketing more pure bred seeds than any other state in the union will be emphasized at the Wisconsin Products Exposition which will be held at the Milwaukee Auditorium from December 14 to December 20.

Prof. R. A. Moore of the College of Agriculture of the University of Wisconsin who has been the

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Sweet Clover, Alfalfa,
Soudan Grass, Millet, Rape.

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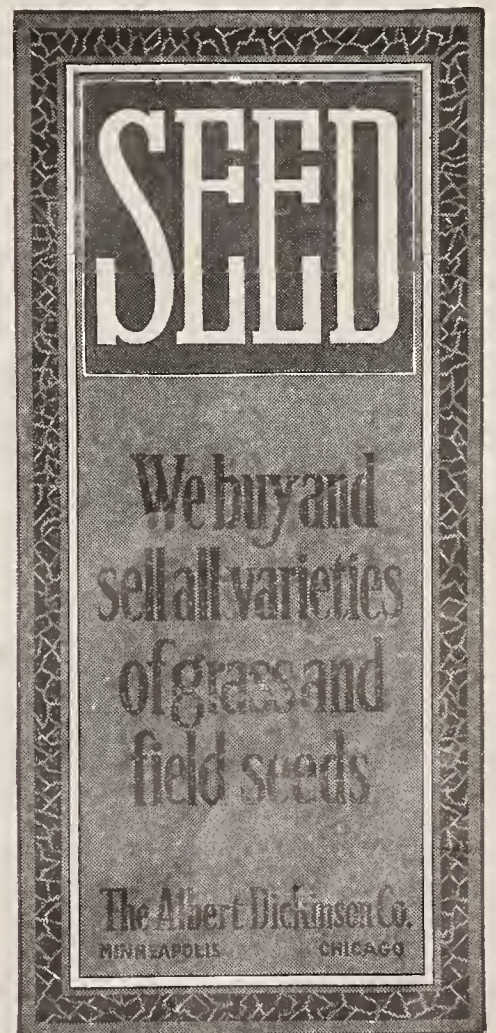
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WHITNEY-ECKSTEIN SEED CO.

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Correspondence Invited

BUFFALO, N. Y.



leader in pure seed production and who will aid in the display of the pure seeds at the exposition of state products points out that the seed buying public is constantly looking for a source of supply in which it can place absolute confidence. Prof. Moore continues: "I think this big show will help to emphasize Wisconsin seed quality in a striking way. When I think back over 20 years to the beginning of our pure seed growers' organization and follow the growth of that organization in its great work of producing and marketing pure bred and pedigreed seed, I am always conscious of the strong influence which our association has had in inspiring confidence in the purchasers of our products."

"We early incorporated the phrase 'Grown in Wisconsin' in our trademark with the hope that we could make the state synonymous with the highest quality and fair price for pure bred seeds."

A new kind of Sweet Clover which has a yellow blossom has been imported from Canada by Fond du Lac County farmers and is being tried out by many farmers of that district. The plant, known as Albatrae Clover, is a biennial which is said to be of finer stem than ordinary White Clover, easier to cure and less likely to become woody and coarse.

The corrected report on the Clover seed crop of Wisconsin for the past year shows estimated production of 294,000 bushels which is 9,000 bushels above the five-year average and about 40 to 45 per cent greater than the crop last year. The yield last year however was far below the normal production. The large crop in 1922 was in the face of the most disastrous winter freeze in Wisconsin for many years. This loss was offset by an exceptionally favorable season in early spring and summer.

The Courteen Seed Company says the seed trade is of good proportions and while the Christmas slow-down is evident to some extent, it is not as large a factor as in other years. A great potential demand for seeds is in the market, the company adds, which will become a concrete fact early in 1923. Rather small offerings, an active demand and a strong market are among the most striking characteristics of the trade at this time, the company's report says and this description can be applied to the seed trade of the city as a whole. The Red Clover quotations given by Courteen's are from \$20 to \$22, White Clover ranges from \$45 to \$52, Alsike is quoted from \$14.50 to \$17, Alfalfa from \$18 to \$20 and Timothy from \$6.50 to \$7. The White Blossom Sweet Clover ranges from \$9 to \$10.50.

An unusual demand for seeds for this time of the year is reported by the North American Seed Company. Other features of the trade as seen by this concern are moderate offerings of seeds and a decided tendency of prices to seek a higher level. While the holiday period is always more or less of a drag on the seed market, the North American company says that in 1922 this is a relatively small factor. Trade of large proportions is predicted when the big buying of seeds begins shortly after the opening of the new year. The Red Clover prices are quoted by the company from \$17 to \$21, the White Clover ranges from \$40 to \$50, Alsike from \$13 to \$17, Alfalfa sells largely from \$19 to \$22, and Timothy from \$6 to \$7. The White Blossom Sweet Clover is quoted at \$10 to \$11.

An active demand for seeds and most excellent prospects for the new year, is the optimistic report of the situation given by the Kellogg Seed Company. The company says there is a trend toward firmer prices in the trade and in a general way offerings of seeds are rather light. The Red Clover is quoted by Kelloggs from \$11 to \$22, the White from \$35 to \$55, the Alsike from \$7 to \$16 and Timothy ranging from \$5.75 to \$7.

A higher price trend is one of the main elements in the seed trade, according to the L. Teweles Seed company. The supply of seed is said to be rather light, while the demand is strong as also indicated by the firmer prices. A brisk trade for the new year, is the prediction of the company and this lively buying is expected to last for several months. The Red Clover is quoted from \$20 to \$22, the White ranges from \$45 to \$55, the Alsike from \$14 to \$17, Alfalfa from \$20 to \$22, Timothy running from \$6.25 to \$7.25 and the White Blossom Sweet Clover around \$10.50.

W. H. Small who was formerly in the seed business at Evansville, Ind., operating under his own name, is now with the Nebraska Seed Company, of Omaha.

A modern Alfalfa seed cleaning plant is to be installed at Parma, Idaho, for the Eagle Packing Company a branch of the Western Seed Company of Denver, Colo.

To deal in seeds, plants, etc., H. A. Sholes & Co., of Chicago, Ill., were incorporated, capitalized at \$20,000. Edw. H. Bishop, John M. Shawvon and Harrison A. Sholes are interested.

Cofer & Barnett, seed dealers, on January 1 will commence to operate at Athens, Ga. H. L. Cofer and M. H. Barnett are interested. The new house will be devoted to selling all kinds of seeds.

A two-story building is being erected to the property of the Dehner Seed & Supply Company

of Burlington, Iowa. The company succeeded George W. Stone in 1916 and since then has grown considerably.

Capitalized at \$5,000, the Seattle Seed Company has been incorporated at Seattle, Wash. The incorporators are Frank Leckenby and W. H. Lilly.

For Sale

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Elevator for sale. If interested, inquire or write WM. AUCHSTETTER, Ida Grove, Iowa.

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To hear from owner having elevator, mill or other property for sale. Give cash price and particulars. JOHN J. BLACK, Chippewa Falls, Wis.

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Four thousand second-hand cotton grain bags, 16-oz., 20 cents each, f.o.b. St. Louis. Large or small lots. FOELL & CO., 123 Market St., St. Louis, Mo.

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Pulleys, 1,000; all sizes, solid cast iron, wood and steel split. Elevator belts and buckets and supplies. STANDARD MILL SUPPLY COMPANY, 501 Waldheim Building, Kansas City, Mo.

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Type Y 25-horsepower Fairbanks-Morse Crude Oil Engine; one 30-horsepower Chicago Pneumatic Crude Oil Engine. A. H. McDONALD, 547 W. Monroe St., Chicago, Ill.

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60-horsepower Fairbanks-Morse.
50-horsepower Otto.
25-horsepower Fairbanks-Morse.
50 other sizes.

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FOR SALE

One No. 5 Williams Mill; ground less than 100 tons of hay.
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Miscellaneous Notices

[Copy for notices under this head should reach us by the 12th of the month to insure insertion in the issue for that month.]

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Hay, Straw and Feed

(Continued from Page 435)

moderate and the demand exceedingly good for the better grades. There is also a fair demand for No. 2 grades. Heavy Clover Mixed hay is strong with an active local demand. All sound grades of Heavy Clover Mixed can be placed in St. Louis to advantage. Pure Clover hay is strong with an active local demand for good No. 1 Clover suitable for the dairy trade. There is also a good feeding demand for the medium grades. This demand will undoubtedly continue good throughout the winter season.

Alfalfa and Prairie hay market is steady. Receipts are moderate and the demand exceedingly good. High grade soft leafy Alfalfa suitable for the dairy trade is selling well and there is also a good demand for No. 1 milling. Offerings of Prairie hay are somewhat more liberal but there is a good demand which is readily absorbing the arrivals at full prices.

A small feed mill is being erected at Eugene, Ore., by E. E. Morrison.

A large feed warehouse was recently opened for business at Lebanon, Pa., by D. S. Stauffer.

D. W. Palmer has sold out his feed and flour business at Hubbardsville, N. Y., to D. J. Stark.

A wholesale feed and hay and grain store has been opened at Mobile, Ala., by Thomas J. McQuillen.

A new warehouse is to be erected at Bluefield, W. Va., for the Peerless Flour & Feed Company.

A feed and flour business is to be conducted at Cameron, Texas, by E. E. Yeager of Iola, Texas.

Mason J. Gibson has opened a feed and flour store at Lowman (North Chemung p. o.), N. Y.

The feed business of Fred Ogle at Keithsburg, Ill., has been sold to Jay Gibson who has taken possession.

Emmet Brantley has sold his Anchor Feed & Seed Company at Tullahoma, Tenn., to Robert Bomar.

The interest of W. H. Gould in the South Side Feed Store at Dodge City, Kan., has been sold by him.

A feed mill will probably be erected at Monticello, Miss., for the McCormick Power & Development Company.

The stock of feed and poultry supplies of J. M. Gray at St. James, Mo., has been purchased by William Beckman.

A. H. Bragdon & Son commenced business in their new feed and flour store at Ladysmith, Wis., on November 18.

Herbert Scott is no longer manager of the Hogan Bros. feed store at Lone Jack, Mo. Frazier Stafford will succeed him.

A feed business has been opened at Altamont, Ill., by Charles Schilling, who will be exclusive agent for Purina Feeds.

The Nogales Feed & Fuel Company is succeeded in business at Nogales, Ark., by the Nogales Feed & Seed Company.

The feed business which H. H. Hardesty has been conducting at Gardena, Calif., as the Gardena Supply Company, has been sold to Magoon & Co. of Los Angeles. Roy J. Walsworth, who has been

with Russell & Jordan in the wholesale hay business in Los Angeles, and R. W. Bultken are interested in the new company.

A feed, flour and seed wholesale warehouse has been opened at Kaukauna, Wis., by the William J. Gantter Company.

A feed store costing \$25,000 is to be erected at Jefferson, Pa., by S. J. Fulton. This replaces the one which burned.

Under the name of the Plants Feed Company, R. C. Plants has entered the feed and coal business at Seymour, Texas.

To conduct a general feed and flour business at Dubois, Pa., the Damus Bros. Company, Inc., have been incorporated.

A feed store has been opened at Cameron, Texas, by Felix Matula & Co., under the management of August Guerecky.

A warehouse is being built at Hatch, N. M., by the Myers Company of El Paso, Texas, for handling feed, flour and grain.

E. E. Evans, Everett Beasley and L. O. Beasley have incorporated at Springfield, Mo., as the E. E. Evans Feed & Seed Company.

The Dairyman's Ice & Supply Company is to establish a feed business and mill at Little Rock, Ark. G. W. Caron is interested.

A feed grinding mill of 110 horsepower has been installed in the grain elevator of the Walworth Lumber Company at Walworth, Wis.

The Magnolia Cotton Oil Company is to erect a feed mill at Magnolia, Miss., costing \$10,000. It will make a specialty of balanced rations.

A feed mill, with capacity of four tons per hour, and driven by three motors of 70-horsepower, is being installed at Kirkland, Ill., by G. W. Bank & Son.

A. C. Myers, W. T. Hicks and Harry E. Myers have incorporated at Wheeling, W. Va., as the Gold Star Feed Company. Its capital stock is \$10,000.

Louis D. Toll is in charge of the feed department of the Quaker City Grain Company at Philadelphia, Pa. He was formerly with S. F. Scattergood & Co.

An elevator at Mendota, Ill., has been leased by the Daisy Feed Store, which will be used to store, mix and grind feed. A. G. Bauman is the proprietor.

New quarters are now occupied by the Maywood Feed & Fuel Store of Los Angeles, Calif. The new building is considerably larger and better equipped than its old store.

The feed business of J. H. Beach has been leased by him at Depew, Okla., to the Kelly Bros. of Chandler, Okla. Mr. Beach is manager of a feed store for William Giles of Bristow.

At Searcy, Ark., the Hicks & Davis Feed Company has been organized. Everett Hicks, senior member of the firm, was formerly a traveling salesman for a wholesale feed company.

Ray A. Frame is now with the Western Feed Manufacturers, Inc. of Chicago, Ill., as sales manager. He was a member of the Frame Bros., feed dealers of Clarksburg, W. Va., for years.

Suttie, Pederson & Hopkins Company has been organized at Omaha, Neb. Until recently Mr. Suttie was traffic manager of the Omaha Hay Exchange; J. C. Pederson was for years official inspector of

the Omaha Hay Exchange and was an approved inspector of the National Hay Association there; Mr. Hopkins was in business with Mr. Hyland for a number of years.

A mixed feed plant is being erected at Arkadelphia, Ark., by the Arkadelphia Milling Company. It will be three stories high, of concrete construction; another loading track will also be installed.

A feed and flour store is to be opened on January 1, by Herman Rollink of Minnesota Junction, who has purchased the building there owned by the Hartig Brewing Company of Watertown.

Business has been discontinued by W. S. Ankeny & Co., millfeed jobbers of Minneapolis. Mr. Ankeny retired some years ago, and E. T. Hamlin, who for years has been sole proprietor, has gone to California.

The Beaver Feed Mills, Inc., of Eugene, have been taken over by Kerr, Gifford & Co., Inc., of Portland, Ore. The mills were established five months ago by G. F. Standage, R. P. Whiting and Elmer Paine.

The business formerly conducted by the Nowlin Feed Company of Indianapolis, Ind., has been purchased by John G. Brown & Boyle. Mr. Brown has been president of the Federated Market Service and F. W. Boyle, secretary.

J. E. McRostin and Mr. Charles have formed a partnership at Toronto, Ont., as Charles & McRostin. Mr. McRostin was formerly in the flour and feed business there and Mr. Charles was with the Caldwell Flour & Feed Company at Dundas.

An attrition feed mill has been installed by J. M. Bergeson in his house at Ashton, Ill. The mill and feed end of the business is to be conducted as Bergeson & Stephan. The grain, flour and coal business at Ashton and Middlebury is under the name of J. M. Bergeson.

The capital stock of the Midwest Feed & Fertilizer Company of Chicago, Ill., has been increased from \$70,000 to \$300,000. A new plant is being built, doubling the capacity. The new building will be at Hammond, Ind., in connection with their present plant.

John F. Deckard is now manager of the feed department of the Kneisler Bros. of Milwaukee. He was formerly with the Federal Mill & Elevator Company at Mansfield, Wis. The Kneisler company is erecting a large fireproof building, two stories high, for the storage of feed, hay and flour.

The Mount Clemens Sugar Refining Company of Mount Clemens, Mich., was awarded \$39,650.26 by the Federal Court in that state in a suit brought against Max Hottelet a feed merchant in Milwaukee, Wis. The plaintiff charged that Hottelet had canceled a contract for the pulp after the sugar had been removed, because it had become spoiled. They were forced to sell the pulp at a lower price and asked judgment for \$71,000.

The court in the case of the J. C. Schafer Company versus the West Tennessee Grain Company of Jackson, Tenn., rendered a verdict favorable to the plaintiff awarding \$8,000 with interest from November, 1917. The suit grew out of an order by the plaintiff to the defendant for a carload of corn in 1917. It was alleged by the plaintiff that the defendants by not carrying out the contract forced them to buy corn on the Chicago open market at a loss.

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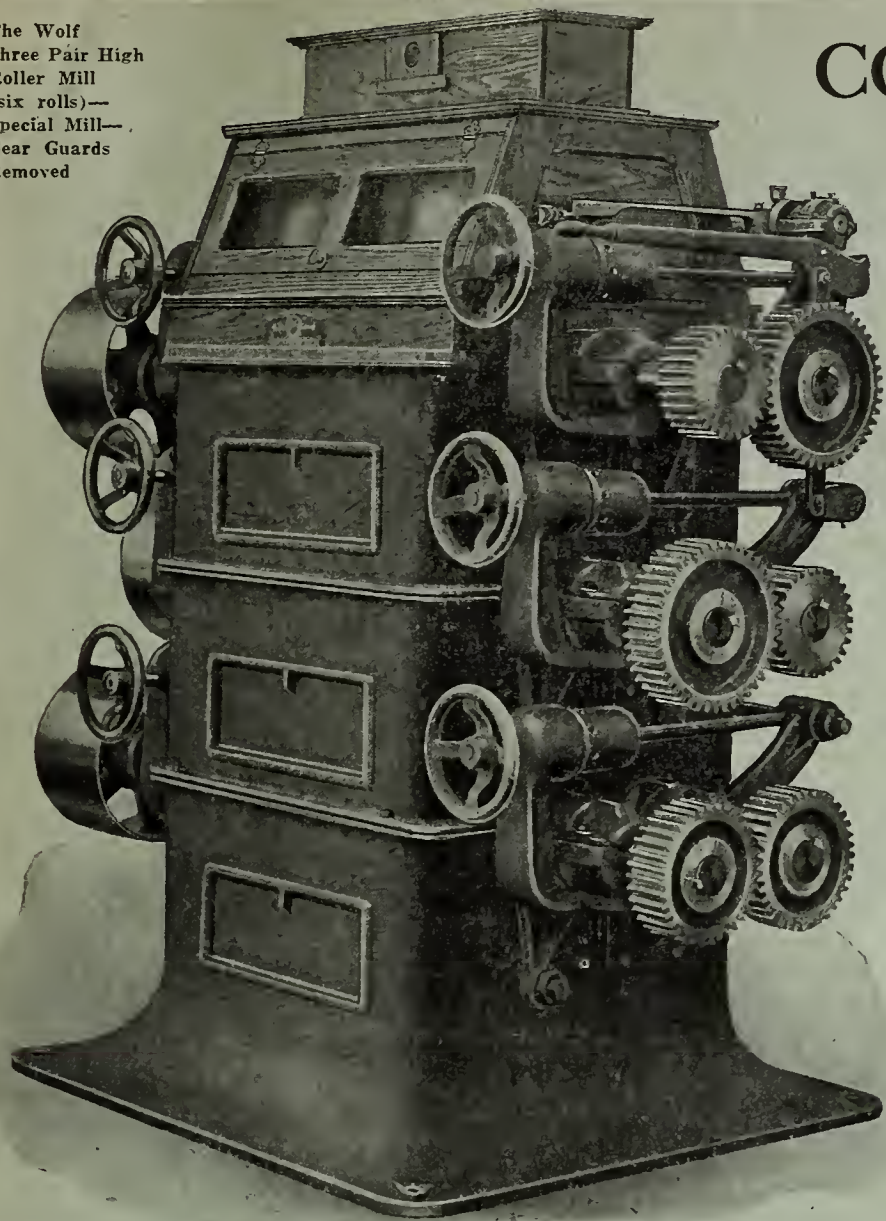
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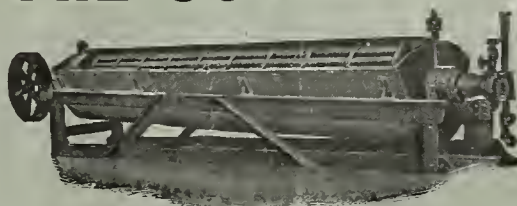
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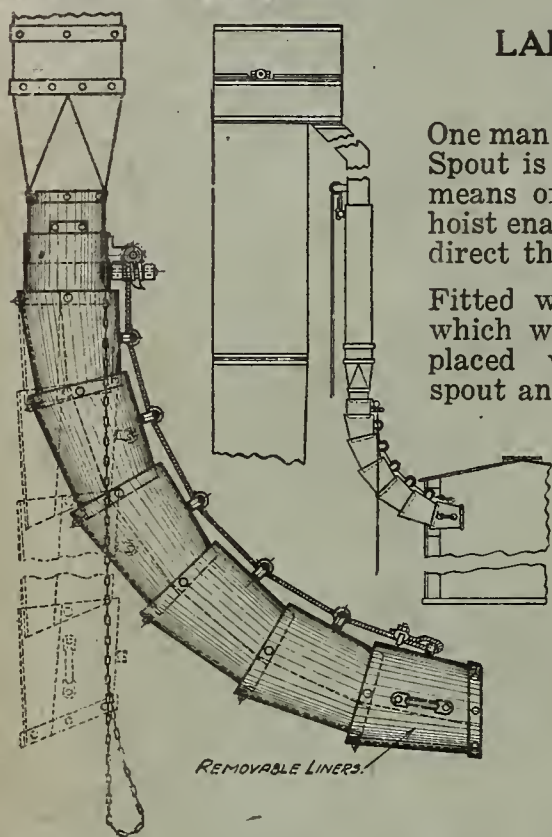
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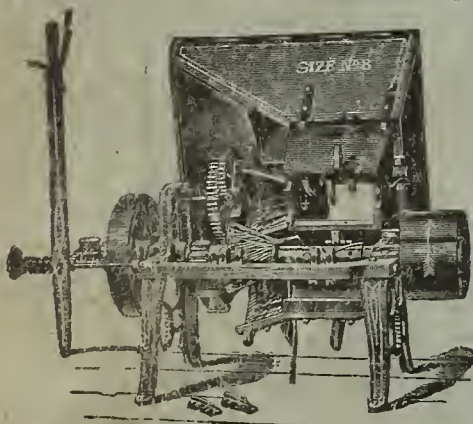
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